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VERIFICATION STUDY ASSESSMENT OF POTENTIAL SOIL AND GROUNDWATER CONTAMINATION NTC ORLANDO FL

12/1/1986

GERAGHTY AND MILLER

VERIFICATION STUDY
ASSESSMENT OF POTENTIAL SOIL AND GROUND-WATER CONTAMINATION AT NAVAL TRAINING CENTER ORLANDO, FLORIDA

Prepared for

NAVAL FACILITIES ENGINEERING COMMAND
Southern Division
Charleston, South Carolina

Contract No. N62467-85-C-0667

G&M PROJECT NO. T0290OL1

December 1986

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INTRODUCTION

An Initial Assessment Study (IAS) was performed at the Naval Training Center - Orlando (NTC) in Orlando, Florida, as part of the Naval Assessment and Control of Installation Pollutants Program (NACIP). This program, administered by the Naval Energy and Environmental Support Activity, is designed to identify potential environmental contamination resulting from past hazardous materials management. The findings of the IAS were presented in a report dated September 1985, entitled: "Initial Assessment Study of Naval Training Center, Orlando, Florida." Based on the findings of the study, it was determined that five sites, shown on Figures 1 and 2, required further evaluation in order to assess their potential long-term impact to the environment and public health. Additionally, another study conducted by Geraghty & Miller, Inc., (G&M) entitled "Hydrogeologic Assessment and Ground-Water Monitoring Plan, Naval Training Center, Orlando, Florida" was submitted in July 1984. This study similarly identified two sites (Sites No. 1 and 3) for further study by the IAS plus both an inactive (NTC) and an active (McCoy Annex) wastewater treatment facility. Only the active WWTP has been retained for further investigation.

Specifically, the five sites recommended by the IAS for further evaluation include: the NTC North Grinder Landfill (Site 1), the McCoy Annex Landfill (Site 3), the DRMO McCoy Annex (Site 6), the Old NTC Pesticide Building (Site 8), and

Lake Baldwin (Site 9). In addition to these five sites, one site not included in the IAS, the McCoy Annex Wastewater Treatment Facility (Site 10), was included in the Work Plan to assess its environmental impact and to meet the requirements of Florida Administrative Code, Chapter 17-4.245.

In March 1986, G&M prepared a Work Plan for performing the verification phase of the Confirmation Study of the NACIP Program at the NTC-Orlando. This Work Plan provided a detailed discussion of proposed work for contamination verification, including comments from the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Regulation (FDER), at the six sites. The verification study, as proposed in the Work Plan, was initiated in June 1986. The results of the verification study and recommendations for further characterization at selected sites are presented in this report.

BACKGROUND

An IAS was conducted at the NTC-Orlando in 1985. The IAS report described in detail the general Naval activities that comprise the NTC-Orlando complexes, the history of each facility and the general physical setting including the topography, climate, geology, soil and surface waters, and the waste types and disposal practices at the individual sites. Accordingly, this verification study report discusses these types of information only where it is enhanced by recently collected site-specific information or is necessary to clarify a particular action or recommendation at a site. Limited background information concerning the McCoy Annex (Site No. 3) area is available in a report entitled "Site Specific Study Sewerage System, Naval Training Center Annex, Orlando, Florida" by Conklin, Porter, and Holmes Engineers, Inc., 1983. This feasibility study addressed the potential alternatives for wastewater treatment and disposal for the McCoy Annex WWTP (Site No. 10).

Command, Naval Administrative Command, Nuclear Power School, and the Naval Hospital.

The facilities currently known as the McCoy Annex were originally owned and operated from around 1950 to the late 1950's by the U.S. Air Force Strategic Command as the Pinecastle AFB. From the late 1950's to 1974, the facility was operated as McCoy AFB. In 1974, the NTC-Orlando acquired the facility and renamed it McCoy Annex (IAS Report, 1985).

The McCoy Annex occupies 877 acres outside of Orlando city limits and is located 12 miles south of NTC-North and just west of the Orlando International Airport. The McCoy Annex serves mainly as a housing and community support activity for the NTC-Orlando (IAS Report, 1985).

WORK PERFORMED

The work performed at the NTC proceeded according to the Work Plan prepared by G&M in March 1986, which is summarized in Table 1. Prior to beginning the field programs at each site, existing data and literature concerning the study areas were collected and reviewed. The field program at each site consisted of essentially the same activities: soil boring/-monitor-well installation, and sediment and water-quality sampling. A hydrogeologist from G&M was present at all times to supervise the drilling program, collect the sediment and water-quality samples, gather water-level information, and perform the field hydraulic conductivity testing.

Monitor-Well Installation

Soil borings were initially drilled with hollow-stem augers at each well location to determine the surficial geology. Continuous sediment samples (split-spoon) were collected from land surface to the total depth of the borehole. The total depth and screen setting of each well were established by site-specific geologic characteristics. Upon completion of sampling to the desired depth, well casing, consisting of 2-inch-diameter PVC pipe with attached 5 ft (feet) of well screen (0.01-inch slot size), was inserted into the borehole. A graded silica sand was installed from the bottom of the well screen to 2 ft above the top of the well screen. The remaining annular space between the borehole and well casing was filled with a neat

Table 1. Work Performed During the Verification Study at NTC-Orlando

SITE NAME AND NUMBER	TYPE OF WASTE MATERIAL	MONITOR WELLS INSTALLED	EXISTING MONITOR WELLS	CHEMICAL ANALYSIS[1/] GROUND WATER	SURFACE WATER (Quantity)	SEDIMENT (Quantity)	SOIL (Quantity)
NTC North Grinder Landfill (Site 1)	Film, photographic chemicals, paint thinner, garbage, biological wastes, paper, plastic, trees, construction materials	4	-	SDW[2/] EPA Priority Pollutants[3/] Rads[4/]	-	-	-
McCoy Annex Landfill (Site 3)	Paint, paint thinner, asbestos, transformers, hospital waste, batteries, metals, paper, plastic, construction materials	5	2	SDW EPA Priority Pollutants Rads	EPA Priority Pollutants (4)	EP Toxicity Metals[5/] (4)	
DRMO McCoy Annex (Site 6)	Drum storage area; drums contained used oil and hydraulic fluid, possibly paint thinner	2	-	EPA Priority Pollutants	-	-	EP Toxicity Metals Pesticides[6/] PCB[7/] (4)
Old NTC Pesticide Building (Site 8)	Various pesticides	3	-	EPA Priority Pollutants	-	-	-
Lake Baldwin (Site 9)	Photographic chemicals including developers, fixers, and activators	-	-	-	EPA Priority Pollutants Composite (1)	EP Toxicity Metals, Cyanide (3)	-
McCoy Annex WWTP (Site 10)	1.2 mgd wastewater treatment facility	2	-	PDW[8/] SDW, VOCs[9/], Phenol	-	-	-

NOTES:

1/ Ground-water samples were analyzed in the field for temperature, pH, and specific conductance.

2/ SDW (Secondary Drinking Water) parameters except color, corrosivity, foaming agents and odor.

3/ EPA Priority Pollutant consisted of: Volatile organic compounds (EPA Method 624)
Acid and base/neutral extractable compounds (EPA Method 625)
Pesticides and PCBs (EPA Method 608)
Metals: antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc.
Cyanide

4/ Rads means analysis for Gross Alpha and Gross Beta.

5/ EP Toxicity metals means extraction procedure toxicity metals including arsenic, barium, cadmium, chromium, lead, mercury, selenium.

6/ Pesticides quantifiable by EPA Method 608.

7/ PCBs means polychlorinated biphenyls quantifiable by EPA Method 608.

8/ PDW (Primary Drinking Water) parameters.

9/ VOCs quantifiable by EPA Method 624.

cement grout to land surface to prevent any surface-water infiltration. The monitor wells were then completed with either a locking above-ground protective casing or a "manhole type" flush-mounted locking cap. Following a minimum of 24 hours after the grout was emplaced, each well was developed by pumping the well for approximately one to two hours to ensure a sand free discharge.

Sixteen monitor wells were installed at the six study areas. Six additional shallow soil borings were augered at the DRMO site (Site No. 6) for soil sample composites. The monitor-well and soil-boring locations at each particular site are shown in the individual site evaluations presented later in this report. The lithologic logs for each monitor well are included in Appendix A. Generally, the wells were similarly constructed; the construction details of a typical well are shown in Figures 4 and 5, and Table 2 lists the specific construction elements of each monitor well.

Surveying

Upon completion of the monitor-well installation, a site survey was conducted to reference the water-level measuring points of each well (top of PVC well casing) to a common datum, mean sea level (msl). The survey, performed by a certified land surveyor, was conducted at those sites having three or more monitor wells. The elevation of the top of the PVC well casing and ground-water elevations at each well are contained in Table 3.

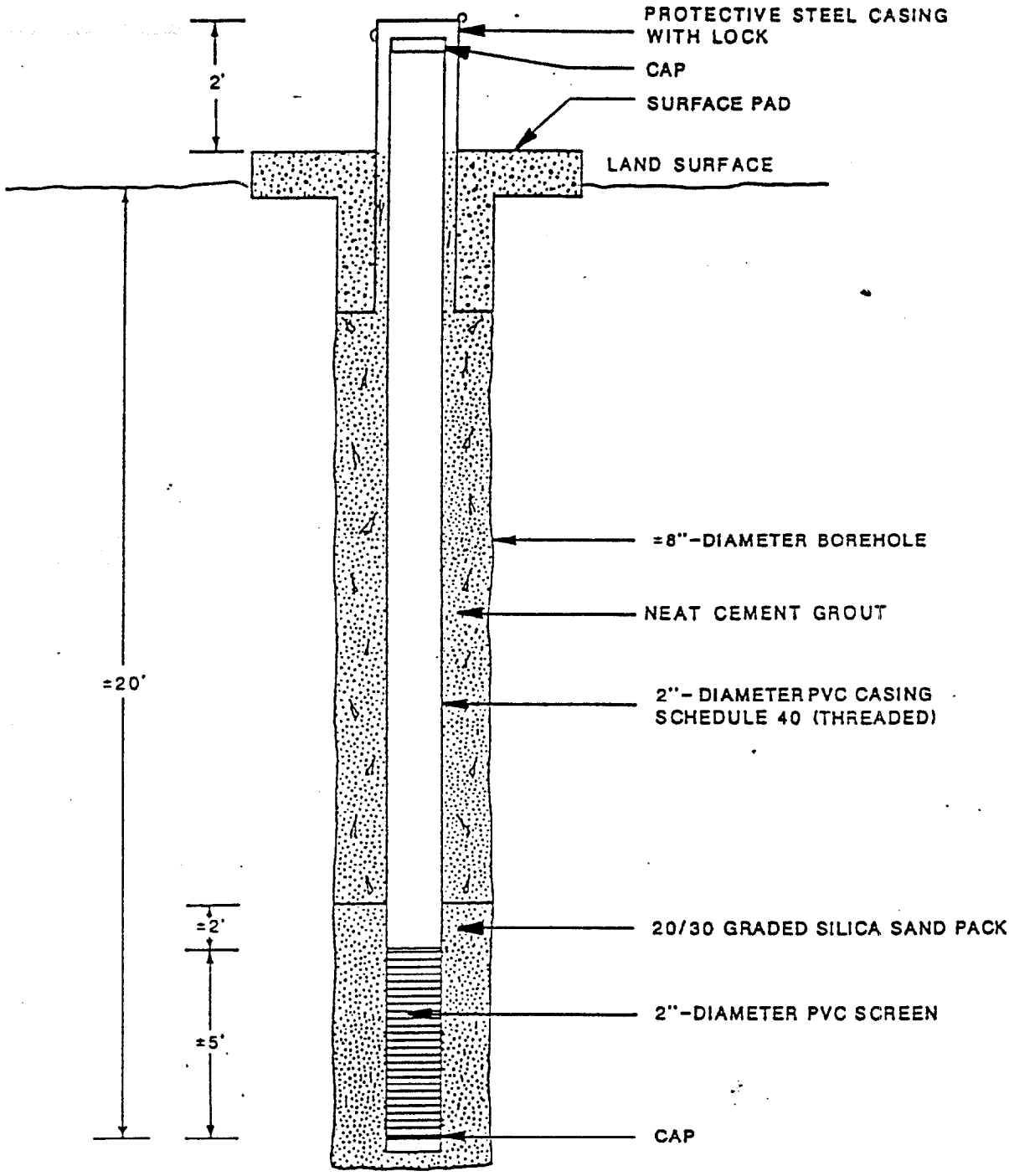

Figure 4. Typical Monitor Well Construction with an Above-Ground Protective Locking Casing.

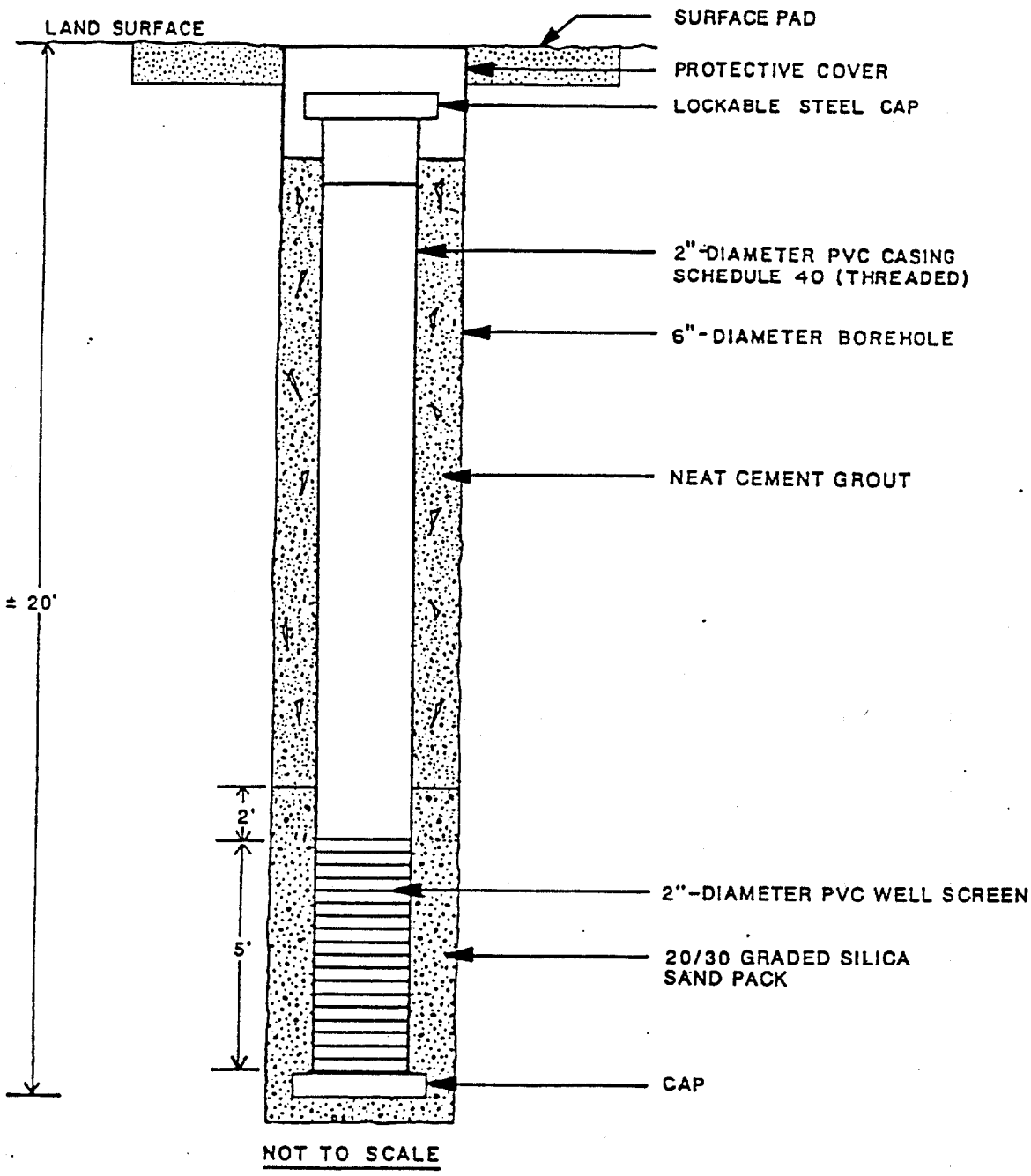

Figure 5. Typical Monitor Well Construction with a Flush Finished Locking Cap

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Table 2. Construction Details of Monitor Wells

MONITOR WELL NUMBER	SITE NUMBER	TOTAL DEPTH (ft below land surface)	SCREEN SETTING (ft below land surface)	MEASURING POINT ELEVATION 2/ (ft msl)
OLM 1	Site 1	13.5	8.5 - 13.5	125.07
OLM 2	Site 1	21.0	16.0 - 21.0	114.86
OLM 3	Site 1	21.0	16.0 - 21.0	113.19
OLM 4	Site 1	21.0	16.0 - 21.0	113.99
OLM 5	Site 3	12.0	7.0 - 12.0	93.70
OLM 6	Site 10	12.0	7.0 - 12.0	92.88
OLM 7	Site 10	11.9	6.9 - 11.9	91.81
OLM 8	Site 3	13.0	8.0 - 13.0	91.25
OLM 9	Site 3	13.5	8.5 - 13.5	91.35
OLM 10	Site 3	12.0	7.0 - 12.0	92.16
OLM 11 1/	Site 3	16.6	11.6 - 16.6	90.70
OLM 12 1/	Site 3	17.1	12.1 - 17.1	92.01
OLM 13	Site 3	14.0	9.0 - 14.0	92.21
OLM 14	Site 6	13.6	8.6 - 13.6	3/
OLM 15	Site 6	13.6	8.6 - 13.6	--
OLM 16	Site 8	12.0	7.0 - 12.0	97.74
OLM 17	Site 8	12.0	7.0 - 12.0	97.75
OLM 18	Site 8	12.0	7.0 - 12.0	97.16

1/ OLM-11 and OLM-12 were installed previously.
2/ Measuring point is the top of the PVC well casing. Elevation is feet above mean sea level.
3/ Blank space means measuring point elevation was not determined.

TABLE 3. GROUND-WATER ELEVATIONS IN THE STUDY AREA[1/]

MONITOR WELL NO.	MEASURING POINT ELEVATION		DATE OF MEASUREMENT 6/18 - 6/20	6/25
OLM 1	125.07		123.27	122.57
OLM 2	114.86		102.96	103.29
OLM 3	113.19		101.47	101.13
OLM 4	113.99		100.47	100.97
OLM 5	93.70		87.42	89.25
OLM 6	92.88		87.60	88.03
OLM 7	91.81		86.68	86.99
OLM 8	91.25		83.91	84.25
OLM 9	91.35		83.17	83.87
OLM 10	92.16		87.08	88.12
OLM 11	90.70		86.10	87.26
OLM 12	92.01		85.73	87.01
OLM 13	92.21	Screen	84.03	84.50
OLM 16	97.74	90.74	93.32	92.92
OLM 17	97.75	90.75	92.96	92.28
OLM 18	97.16	90.16	93.08	92.31

1/ All measurements in feet above mean sea level

Sampling and Analysis

During the verification study, 18 ground-water samples, 5 surface-water samples, 4 soil boring samples, and 7 bottom sediment samples were collected by G&M personnel and analyzed by a private laboratory for site-specific chemical compounds. Table 1 summarizes the chemical analysis performed on the sample medium at each particular site.

To collect the ground-water samples, five well volumes were initially removed from the well with a peristaltic pump followed by well sampling with a Teflon bailer. Field measurements of temperature, pH, and specific conductance were made on the ground water at the time of sampling and are summarized in Table B-1 of Appendix B. The sample containers were supplied by an FDER approved laboratory, Compuchem Laboratories, all containers requiring preservatives were prepared by G&M according to EPA Report Number 6700/4-79-020. Additionally, the sample containers were stored on ice prior to delivery via air freight to the laboratory using appropriate chain-of-custody procedures. The laboratory water-quality results are presented, by site, in Appendix B.

The four soil boring samples collected at the DRMO site (Site No. 6) were obtained directly from the hollow stem auger and composited on site. A detailed discussion of these activities is presented in the DRMO site-specific discussions. These samples also were delivered via air freight to the laboratory within 48 hours from the time of sampling.

The laboratory results for the soil boring analyses are presented with the water-quality data in Appendix B.

Surface-water and bottom-sediment samples were also collected at two sites as proposed in the Work Plan. Bottom sediment samples were obtained with a stainless steel hand auger. Surface-water samples were obtained by inserting the sample container to a mid-depth point of the surface-water channel and removing the cap, allowing the container to be filled. As with all samples, the surface-water and bottom-sediment samples were delivered via air freight to the laboratory within 48 hours from the time of sampling. The results of the surface-water and bottom-sediment analyses are presented with the water-quality data in Appendix B.

Laboratory vertical permeability was calculated from two shelby-tube samples collected at OLM-1 (8 to 10 ft bls [feet below land surface]) and OLM-16 (8 to 10 ft bls); the results were 1.92×10^{-5} cm/sec (centimeters per second) and 3.12×10^{-4} cm/sec, respectively. Also, grain-size distribution curves were prepared from seive analyses from selected soil samples. These data are presented in Appendix C and discussed in the site-specific findings sections.

In-situ hydraulic conductivity testing (slug tests) of the surficial aquifer was performed at five locations (wells OLM-01, 03, 08, 13, and 16) during the study. These data,

presented in Table 4, were evaluated by the methods of Bouwer and Rice (1976), and discussed in the site-specific findings section.

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Table 4. Results of In-Situ Hydraulic Conductivity Testing (Recovery Data)

Monitor Well No.	Calculated Hydraulic Conductivity
Site No. 1	
OLM-01	1.4×10^{-4} ft/sec
OLM-03	4.5×10^{-5} ft/sec
Site No. 23	
OLM-08	2.9×10^{-5} ft/sec
OLM-13	1.0×10^{-4} ft/sec
Site No. 8	
OLM-16	2.7×10^{-5} ft/sec

HYDROGEOLOGIC SYSTEM

Topography and Drainage

The NTC-Orlando is located in central and south-central Orange County on the Osceola Plain. This land form is part of the Atlantic Coastal lowlands, one of the major land forms that make up the Coastal lowlands physiographic division of Florida (Puri and Vernon, 1964). The topography varies from gently sloping to flat with the presence of numerous ponds and lakes.

The NTC-North facility is located at the highest elevations of the NTC-Orlando. It ranges in elevation from a high of 130 ft msl (feet above mean sea level) near the Recruit Training Command to a low of 91 ft msl near Lake Baldwin. Surface water from the NTC-North is discharged into Lakes Susannah and Baldwin, which in turn discharge via a county-owned drainage canal into the Little Econolockhatchee River located approximately six miles southeast of NTC-North (IAS Report, 1985).

The terrain at the McCoy Annex is essentially flat with elevation ranging from 90 to 85 ft msl. Regional drainage is poorly developed but is generally toward the south to the canals and tributaries which lead to the Kissimmee River (Leighty, et al, 1960). Locally, surface-water runoff flows south into Boggy Creek.

Geologic Framework

The NTC-Orlando is underlain by several thousand feet of sediments ranging in age from Upper Eocene to Recent. The surficial sediments are characterized as undifferentiated sands, clays, silts, shells, and minor amounts of organic material. This sequence of sediments may range in thickness from almost 0 to about 200 ft. Underlying the surficial sediments are the characteristic gray-green clayey sand and silt, phosphatic sand, and phosphatic limestones of the Hawthorn Formation. Thickness of the Hawthorn Formation ranges from about 50 ft in the northwestern part of Orange County to approximately 300 ft in the southeastern part of the county (Lichtler, et al, 1968). The Hawthorn Formation serves as a confining layer which separates the surficial aquifer from the underlying Floridan aquifer, although permeable sands and limestones within the confining clays form an intermediate aquifer. Figure 6, a composite geologic column constructed from well logs and published data from the area, shows the relationship of the stratigraphy to ground-water occurrences.

The Hawthorn Formation unconformably overlies the Ocala Group, a highly eroded series of limestones. In the vicinity of the study area, the top of the Ocala Group occurs at a depth of about 200 ft or at about -100 ft msl. In Orange County, the Ocala Group ranges in thickness from 0 to about 100 ft and overlies the Avon Park and Lake City Limestones.

The latter two limestones have a combined thickness in excess of 1,100 ft. These three limestone sequences contain the Floridan aquifer, the principal source of water supply for public, commercial, and agricultural uses in the area.

Occurrence and Movement of Ground Water

Surficial Aquifer

The surficial aquifer generally ranges from 0 to 50 ft in thickness and is comprised of unconsolidated sands, with varying amounts of silt and clay. These sediments are generally saturated with ground water at depths of 3 to 8 ft bls and the ground water exists under water-table conditions. The surficial aquifer is recharged primarily by precipitation. Ground-water movement in the surficial aquifer is primarily horizontal due to the presence of lower permeability clayey sands, and clays at the base. Basically, shallow ground water moves from topographic highs to areas of discharge such as ditches, streams, rivers, or surface-water bodies. In areas having three or more monitor wells, ground-water flow patterns have been established and are included in the individual site evaluations.

The shallow ground-water flow rate has been calculated using the hydraulic conductivities (Table 4), hydraulic gradients at sites 1, 2, and 8 (determined from Figures 9, 11, and 13), and an assumed effective porosity of 25 percent. Based on these data, the flow rate ranged from 262 ft/yr

(feet per year) at Site No. 1 (NTC-North Grinder Landfill) to 7.3 ft/yr at Site No. 2 (McCoy Annex Landfill).

-3

Intermediate Artesian Aquifer

The intermediate aquifer occurs locally within the discontinuous shell beds, thin limestone lenses or permeable sand and gravel zones of the Hawthorn Formation confining bed. This aquifer is usually found at depths ranging from about 60 to 150 ft bls and recharge to it is from downward leakage from the water-table aquifer and by upward leakage from the Floridan aquifer in areas where the hydraulic gradient is upward (Litcher, et al, 1968). However, due to the discontinuous nature of the intermediate aquifer and the overall confining nature of the Hawthorn Formation, the hydraulic interconnections to the overlying and underlying aquifers are probably rather poor and therefore ground-water flow into and out of this aquifer would be at a very slow rate.

Floridan Aquifer

The Floridan aquifer consists of over 1,400 ft of limestone and dolostone formations of the Ocala Group and the Avon Park and Lake City limestones. It is the principal artesian aquifer in Orange County with transmissivity coefficients ranging as high as 1,000,000 gpd/ft (gallons per day per foot). Within the study area, the Floridan aquifer has two major producing zones. The upper producing zone

extends from about 150 ft to about 600 ft and the lower producing zone extends from about 1,100 ft to 1,500 ft. The limestone of the top half of the upper producing zone is mostly white-colored fossiliferous and granular limestone containing small solution cavities. The lower half of the upper producing zone and the entire lower producing zone are primarily composed of hard, brown dolomitic limestone or dolostone containing cavities and relatively soft cream-colored limestone (Lichter, 1968). The McCoy Annex Golf Course irrigation well and the Orlando International Airport irrigation well have been completed in the upper zone of the Floridan as shown in the available driller's logs (Conklin, et al, 1983). The municipal supply wells for the City of Orlando are developed in the lower producing zone (Lichter, 1968).

The potentiometric surface of the Floridan aquifer in May 1986 (Schiner, 1986) is shown in Figure 7. The average potentiometric surface elevation of the Floridan aquifer in the study area is about 43 ft msl, with a seasonal fluctuation as great as 15 ft (Lichter, 1968). The general ground-water flow direction in the Floridan aquifer is to the east.

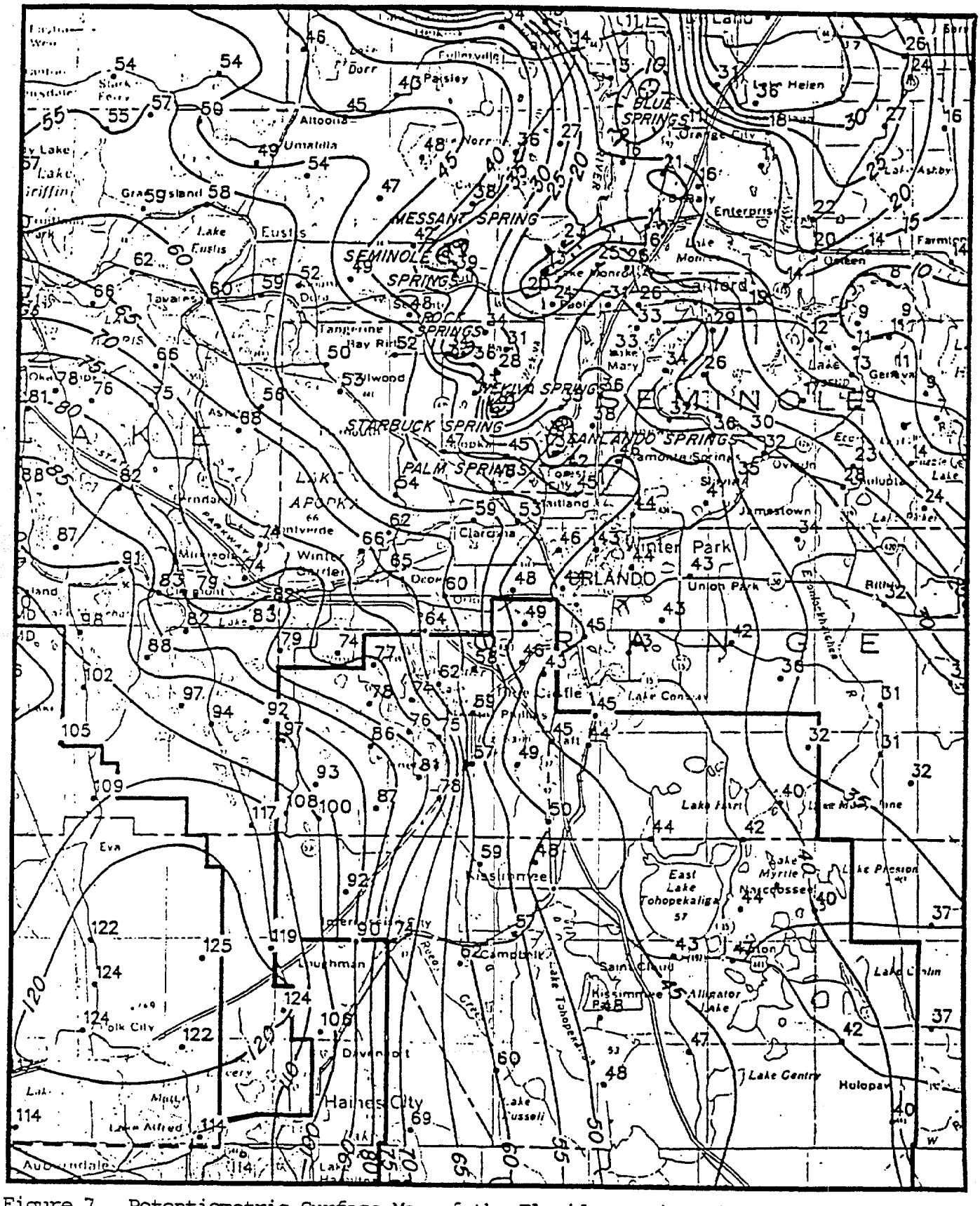


Figure 7. Potentiometric Surface Map of the Floridan Aquifer in the Study Area in May 1986

NTC NORTH GRINDER LANDFILL (SITE NO. 1)

Background

The NTC North Grinder Landfill, shown in Figure 8, is located under the asphalt paved area presently known as "grinder" parade area. Landfilling began around 1958 and continued through 1967, when the parade area and buildings 212 and 214 were constructed. The landfill reportedly covered over 15 acres and was constructed of trenches less than 10 ft deep, 10 to 20 ft wide, and 50 ft long. Wastes reportedly disposed in the landfill include film, photographic chemicals, paint thinner, garbage from mess halls, cardboard boxes, biological wastes from the hospital, paper, plastic, tree limbs, and construction material. It is estimated that 194,000 cubic yards were disposed of in the landfill and that approximately one-third was removed during construction in 1967 (IAS Report, 1985).

Findings and Recommendations

Four shallow monitor wells (OLM-1, OLM-2, OLM-3, OLM-4) were installed at locations shown in Figure 8. Ground-water samples from these wells were analyzed (Table 1) for FDER, SDW (secondary drinking-water parameters), EPA (Environmental Protection Agency) list of priority pollutants which include VOCs (volatile organic compounds), acid and base neutral extractable compounds, pesticides, PCBs (polychlorinated biphenyls), metals, cyanide, and RADs (Gross Alpha and Gross

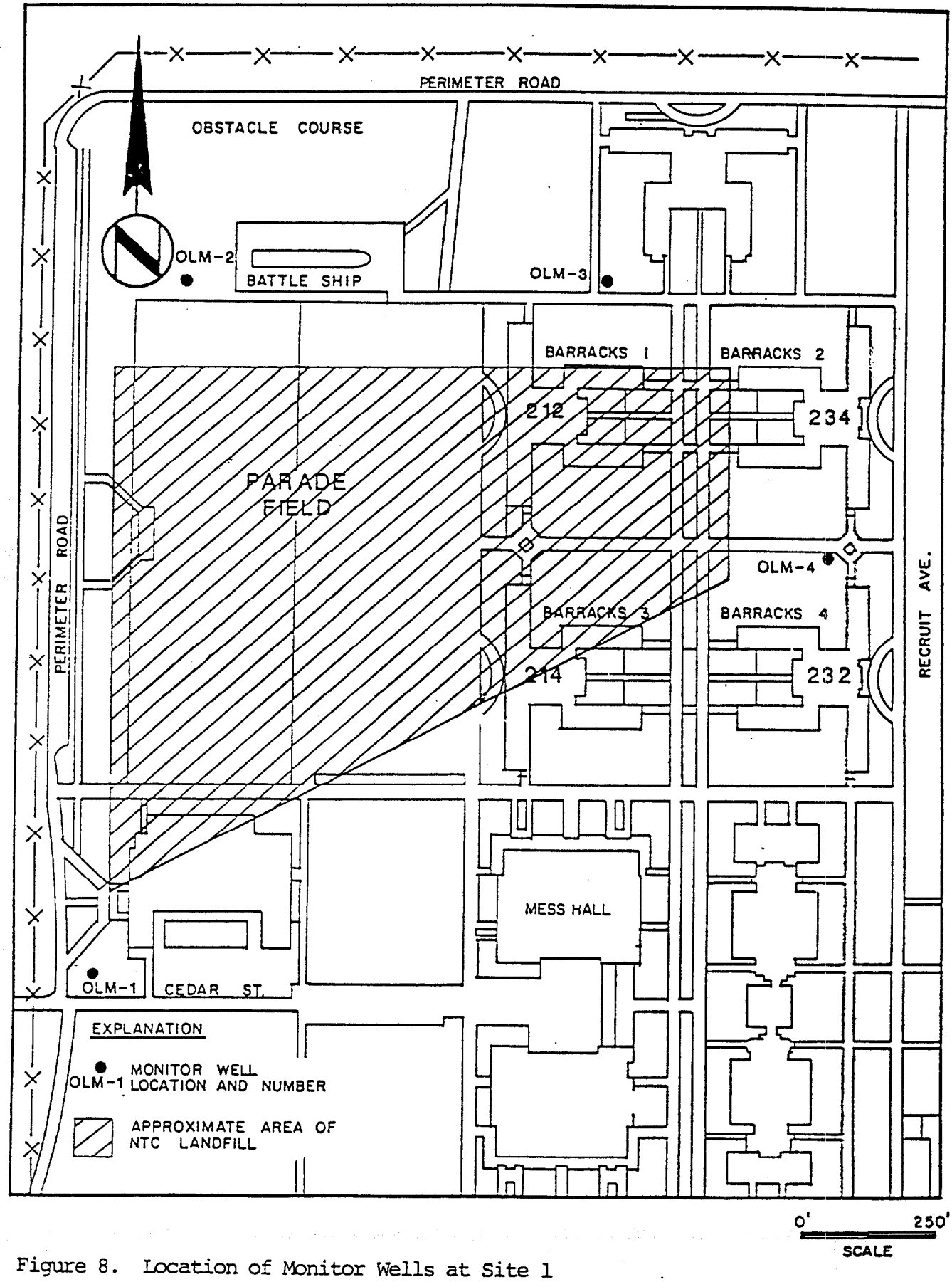


Figure 8. Location of Monitor Wells at Site 1

Beta). Based on the hydraulic conductivities measured (slug tests) at OLM-01 and OLM-03, the hydraulic gradient at the site (Figure 9) and assumed porosity (.25), the ground-water flow rates range from 262 ft/yr to 83 ft/yr. Accordingly, any dissolved constituents migrating with the shallow ground water could have reached the monitor wells.

The results of these analyses, presented in Appendix B, Section 1, indicated that the shallow ground water is free from most constituents analyzed. Except for some inorganic compounds within the SDW constituents, only iron at 1.5 mg/l (milligrams per liter) exceeded the drinking-water standard in well OLM-01. The concentration of arsenic 0.068 mg/l in well OLM-03 exceeded FDER's primary drinking-water standard of 0.05 mg/l and elevated levels of RADs were detected in all four monitor wells. The only organic constituent detected was methylene chloride at 15 ppb (parts per billion) in monitor well OLM-04.

It is recommended that a one-year program of quarterly water-quality sampling and water-level measurements be implemented by collecting samples from all of the wells and analyzing for EPA priority pollutant metals, VOCs, and RADs. The RADs samples should first be filtered using a 0.45-micron sediment filter to remove suspended solids prior to analyses. It is expected that filtration of the water-quality samples will provide more representative results for the dissolved radiological compounds. Suspended sediment may produce

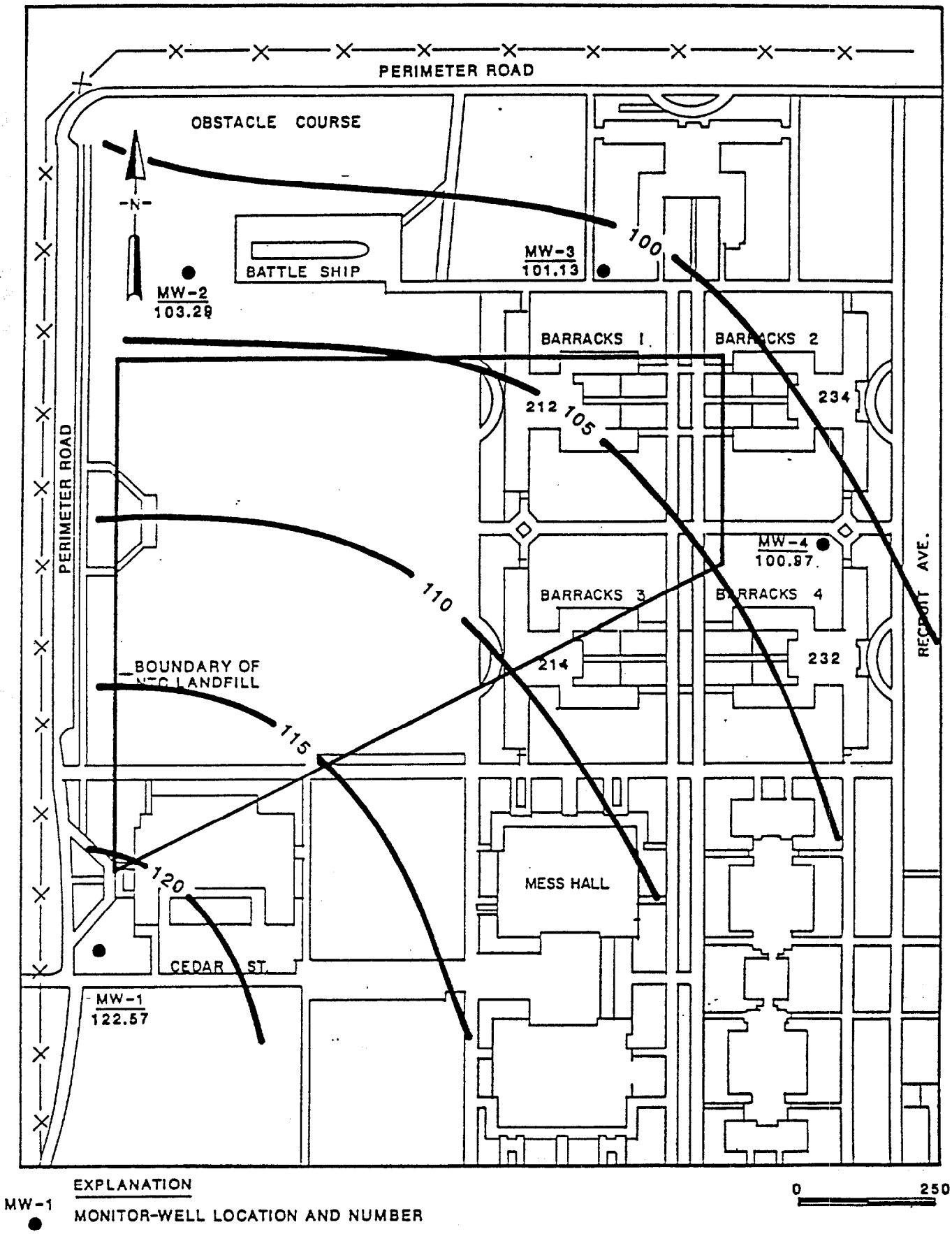


Figure 9. Configuration of the Water-Table Aquifer on June 25, 1986, at Site 1

elevated concentrations of RADS not representative of the ground-water quality. During the next sampling event, if gross alpha is detected at 5 pci/l (picocuries per liter), then Radium 226 and 228 will be analyzed.

MCCOY ANNEX LANDFILL (SITE NO. 3)

Background

The McCoy Annex Landfill, shown in Figure 10, was operated from around 1960 to 1972 in the western portion and from 1972 to 1978 in the eastern portion. The landfill was constructed of large trenches reportedly 100 to 200 ft long, 20 to 25 ft wide, and 10 to 15 ft deep and covered over 99 acres. In 1981, a golf course was constructed over much of the original landfill area. Wastes reportedly disposed in the McCoy Annex Landfill include unknown quantities of paint and paint thinner, asbestos, transformers, hospital wastes, low-level radiological waste, automobile batteries, steel cable, airplane parts, waste oil, and yard wastes.

Findings and Recommendations

Five monitor wells were installed by G&M during the study. Two of wells previously installed by Conklin, Porter and Holmes, 1983, were incorporated into the verification study as shown in Figure 10. Ground-water samples from the seven wells were analyzed for SDW, EPA Priority Pollutants, and RADs. Additionally, four surface-water and sediment samples were collected at stations shown in Figure 9/10 and analyzed for EPA Priority Pollutants (surface water) and metals (sediment samples) by Extraction Procedure (EP) Toxicity.

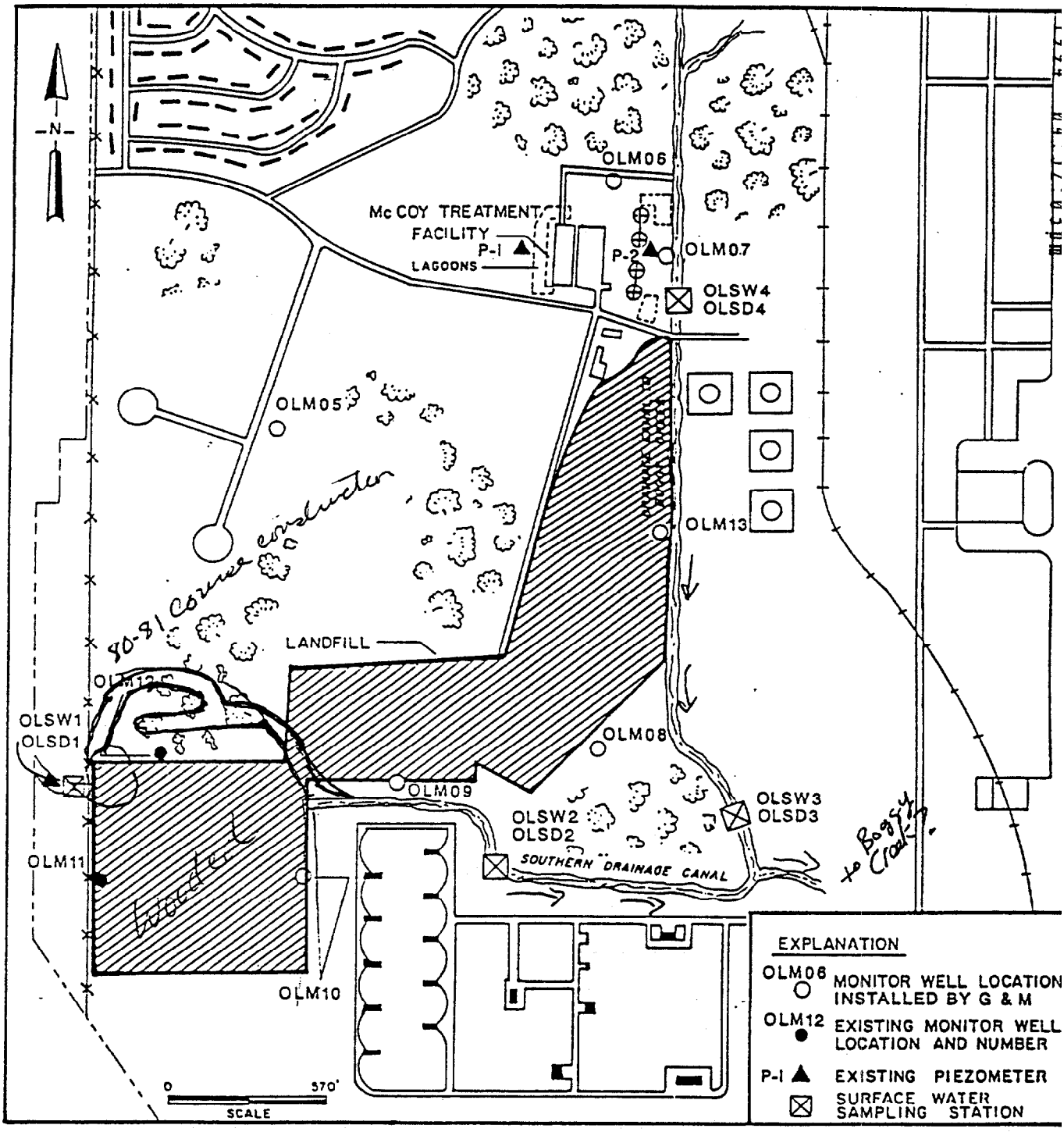
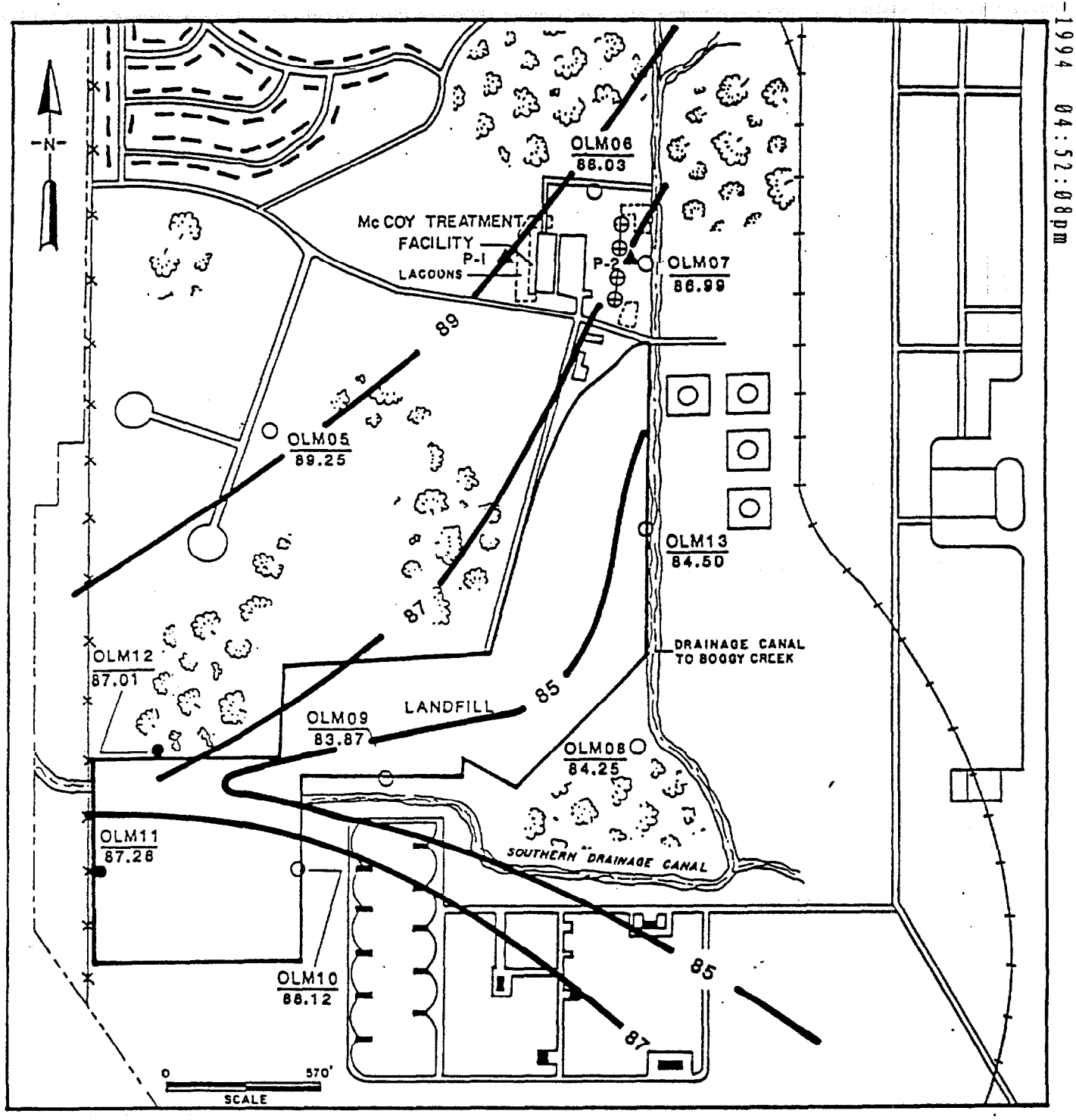


Figure 10. Location of Monitor Wells and Surface-Water Sampling Stations and Water-Table Elevations (June 25, 1986) at Site 3

Based on hydraulic conductivities measured at OLM-08 and OLM-13 (Table 4), the hydraulic gradient (Figure 11) and assumed porosity (.25), the shallow ground-water flow rate ranges from 25 ft/yr to 7 ft/yr. Due to the proximity of the monitor wells to the landfill and the estimated flow rate, the wells should encounter any constituents moving with the ground water.

The analytical results of the monitor well sampling presented in Appendix B, Section 2, indicated elevated levels of iron and RADs in all seven wells, and elevated levels of manganese in wells OLM-11 and OLM-12. Four VOCs (benzene at 31 ppb, chlorobenzene at 36 ppb, ethylbenzene at 10 ppb, 1,4-dichlorobenzene at 8.3 ppb) and napthalene (16 ppb) were detected in well OLM-12. Surface water and sediment samples collected along the drainage canals, as shown in Figure 10, indicated elevated levels of phenols at all four surface water sampling locations ranging from 1.0 to 3.4 ppm. Arsenic was also detected in the sediments at station OLSD-3 at 53 ppb.

It is recommended that a one-year program of quarterly sampling be implemented by collecting ground-water samples from all of the wells . Water-level measurements will also be collected at the time of sampling. These samples should be analyzed for VOCs, metals (primary drinking water), and RADs. As discussed previously, the RAD samples should be filtered using a 0.45 micron filter to insure a



EXPLANATION

OLM06 ○ MONITOR WELL LOCATION AND NUMBER INSTALLED BY G & M

OLM12 ● EXISTING MONITOR-WELL LOCATION AND NUMBER

P-1 ▲ EXISTING PIEZOMETER LOCATION AND NUMBER

Figure 11. Configuration of the Water-Table Aquifer on June 25, 1986, at Site 3

representative determination of dissolved ground-water constituents. Whenever the gross alpha exceeds 5 pci/l, then the samples will be analyzed for radium-226 and radium-228.

MCCOY ANNEX DRMO (SITE NO. 6)

Background

The Defense Re-Utilization Marketing Office (DRMO) site (See Figure 12) proposed for contamination verfication was reportedly an unpaved area measuring 30 ft by 6 ft located in the southeastern section of the DRMO yard at the McCoy Annex. This area was used for drum storage and during the IAS, it was noted that the drums were in various stages of deterioration. The majority of the 55-gallon drums reportedly contain used motor oil, antifreeze, and hydraulic fluid; however, one drum was marked "Paint Thinning Liquid" and the contents of a few were unknown. The drums have been secured and removed from the area.

Findings and Recommendations

During the site visit in May 1986, it was noted that the DRMO site was not an unpaved area as reported, but was and had been an asphalted area. DRMO personnel were interviewed and the exact location of previous drum storage on the asphalt was determined and the verification study, as proposed, was implemented.

Two shallow monitor wells were installed at locations shown in Figure 12. Ground-water samples were analyzed for EPA Priority Pollutants. Additionally, four soil samples were collected and analyzed for EP Toxicity metals, total pesticides, and total PCBs (see Table 1). These samples

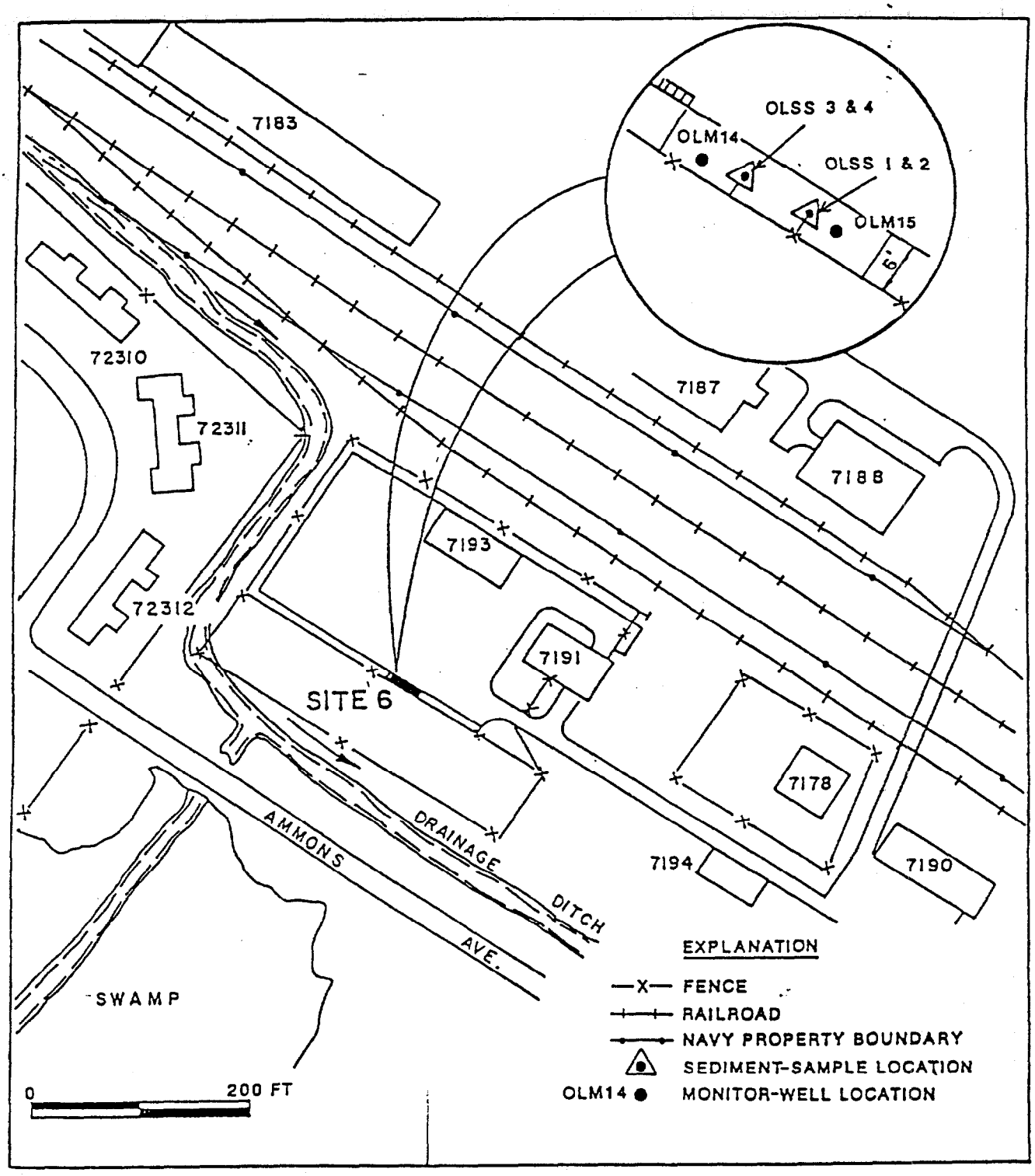


Figure 12. Location of Monitor Wells and Soil Sampling Locations at Site 6

consisted of composites gathered from two locations at two depths; samples OLSS-1 and OLSS-3 were collected from 0 to 2 ft and OLSS-2 and OLSS-4 were collected from 2 to 4 ft at each site.

Analytical results for the ground-water and soil samples collected at the DRMO are presented in Appendix B, Section 3. Only a trace amount of methylene chloride (estimated to be 8.2 ppb), a ubiquitous laboratory agent, was detected in the ground-water sample from well OLM-15. No detectable priority pollutants were found in the soil sample composites from the DRMO. Based on these findings, the site does not pose a threat to human health or the environment and no additional study is recommended.

OLD NTC PESTICIDE BUILDING (SITE NO. 8)

Background

This building, shown on Figure 13, was used from the early 1950's to 1972 as a storage, mixing, and cleaning area for all pest control operations at NTC North. The building measured 15 ft wide and 30 ft long and was demolished and covered with sandy soil in 1981. The pesticides were mixed in containers on the ground and reportedly spills may have occurred. Additionally, it is estimated that pesticides may have been in the building when it was demolished.

Findings and Recommendations

During the site visit of May 1986, it was noted that the location of the old NTC-Pesticide Building was erroneously drawn on Figures 3 and 4 of the September 1985 IAS Report and the March 1986 Work Plan. After discussions with the NTC-North Golf Course Greenskeeper and personnel within the Public Works Department, the exact location of the former building was noted and monitor-well installations were appropriately changed. Three shallow wells (OLM-16, OLM-17, and OLM-18) were installed as shown in Figure 13. Ground-water samples were analyzed for SDW and EPA Priority Pollutants (Table 1).

As seen in Figure 13, the shallow ground-water flow direction is to the northeast or toward Lake Baldwin. Based on the hydraulic conductivity data obtained from the slug

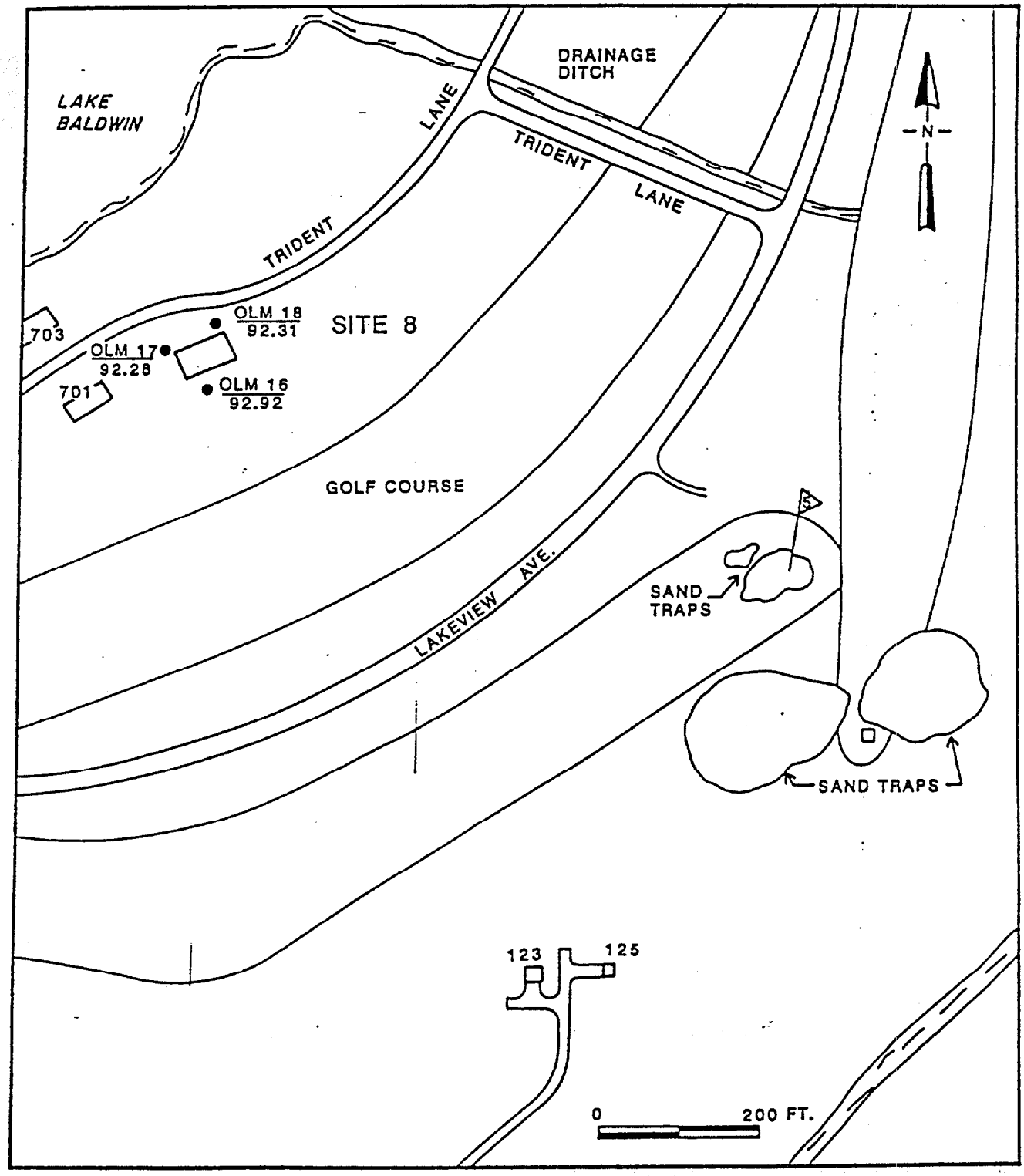


Figure 13. Location of Monitor Wells and Water-Table Elevations (June 25, 1986) at Site 8

test at OLM-16, the hydraulic gradient of the site (Figure 13) and assumed porosity (.25), the shallow ground-water flow rate is approximately 23 ft/yr. Accordingly, due to the time since the site was last used (14 years), the installed well should monitor dissolved constituents moving with the ground water.

Analytical results of the ground-water samples are presented in Appendix B, Section 4. These data reveal that no SDW parameters were detected above their respective maximum concentration limits. Trace levels of Bis (2-ethylhexyl) phthalate (6 ppb) was detected in OLM-17 and one VOC, ethylbenzene (13 ppb), three acid extractables, phenol (estimated at 7 ppb), 2 chlorophenol (estimated at 7 ppb) and 2,4-dichlorophenol (33 ppb), one base-neutral extractable, and one pesticide, chlorodane (7 ppb).

Based on these results, it is recommended that an additional monitor well be installed hydraulically downgradient between this site on Lake Baldwin and that a one-year quarterly sampling program be implemented by collecting samples from the newly installed well and wells OLM-17 and OLM-18. Water levels will be collected at the time of sampling to evaluate the shallow ground-water flow rate and direction. These data will form the basis for performing a risk assessment analysis to determine the need for corrective action. The wells will be resampled initially for VOCs, acid and base neutral extractables, and pesticides

and herbicides; however, prameter groups will be discontinued depending on the laboratory results.

LAKE BALDWIN (SITE NO. 9)

Background

Lake Baldwin, shown in Figure 14, is used as a recreational lake for boating, swimming, and water skiing by both military personnel and the public, and for military training. From the early 1950's through 1978, photographic chemicals were reportedly discharged into Lake Baldwin through a storm sewer from Building 2089. These photographic chemicals include developers, fixers, and activators.

Findings and Recommendations

One surface-water sample (OLS-W5) was collected as a composite from the three mid-depth sample locations for all (OLSD-5, 6, 7) EPA Priority Pollutant analysis except VOCs. Individual VOC vials were collected at each sample location OLSD-5, OLSD-6 and OLSD-7 reported as OLSW-5a, OLSW-5b, and OLSW-5c respectively. Three bottom sediment samples were also collected and analyzed for EP Toxicity metals and cyanide.

The analytical results of the surface-water composite sample and the bottom sediment samples are presented in Appendix B, Section 5. The results indicate no detectable concentrations of any priority pollutants from the bottom sediment samples. The surface-water composite revealed 1.2 ppm (parts per million) of phenols and alpha BUC at the detection limit of 10 ppb. Based on these results, no

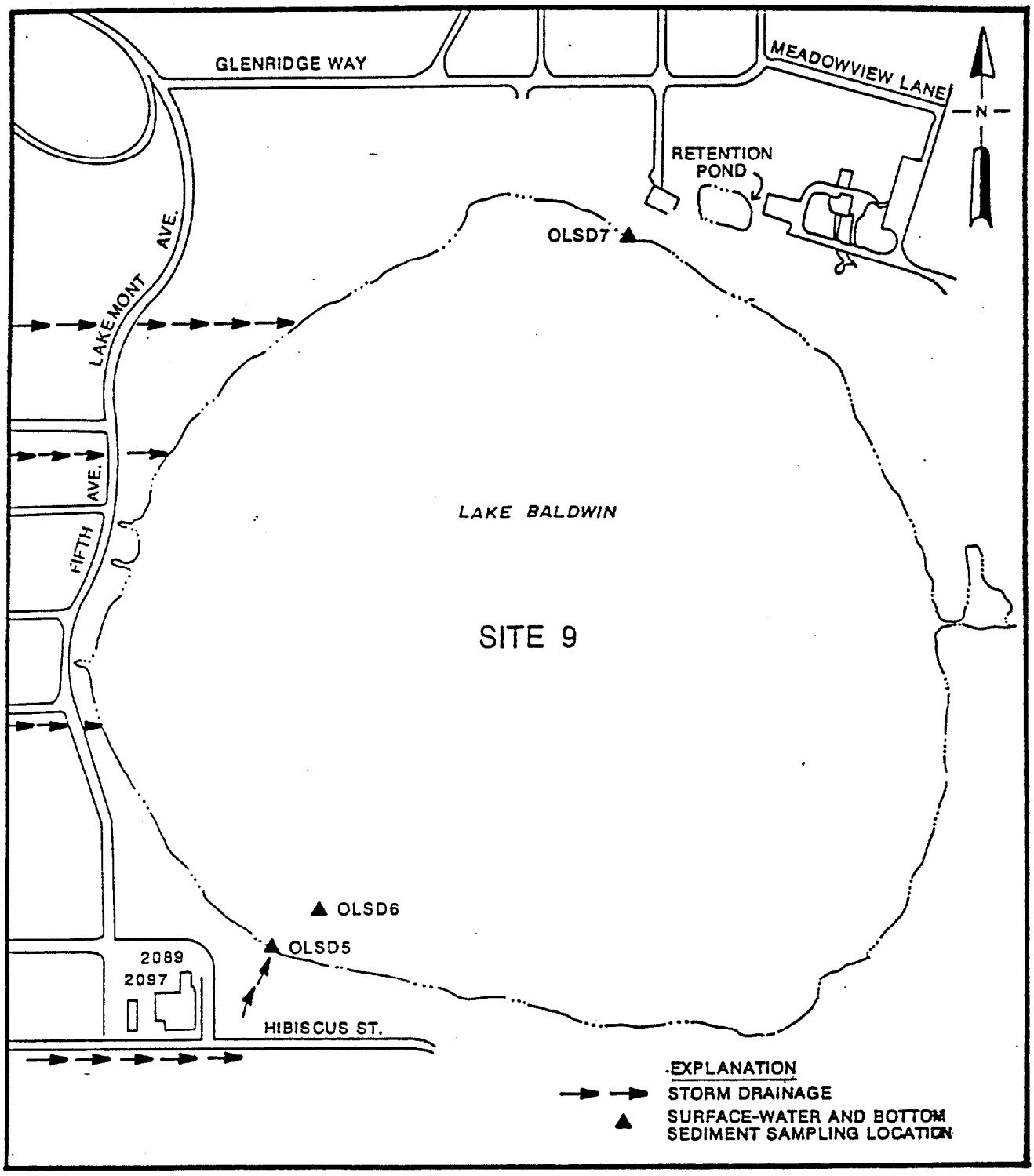


Figure 14. Location of Surface Water and Bottom Sediment Sampling Station at Site 9

additional investigation is proposed for the Lake Baldwin site.

MCCOY ANNEX WWTP (SITE NO. 10)

Background

The McCoy Annex Wastewater Treatment Plant (WWTP), shown in Figure 4, was not included in the IAS but has been included in this Work Plan as a site recommended for further evaluation. The 1.2 mgd (million gallons per day) facility discharges effluent into three treatment lagoons for nitrogen removal. Under Florida Administration Code, Chapter 17-4, Section 17-4.245 (6) (d), ground-water monitoring is required for these surface lagoons.

Findings and Recommendations

Two shallow monitor wells were installed as shown in Figure 10. Ground-water samples were collected and analyzed (Table 1) for the PDW (Primary Drinking Water) parameters, SDW, VOCs, and phenol.

The analytical results of ground-water samples from monitor wells OLM-06 and OLM-07 are presented in Appendix B, Section 6. These data show elevated levels of iron in OLM-06 and concentrations of manganese (0.17 ppm), TDS (1,100 ppm), sulfate (340 ppm), and nitrate (32 ppm) in well OLM-07. Since this is an active facility, additional monitoring is required in accordance with Chapter 17-4 FAC. Therefore, it is recommended that samples be collected quarterly for one year and analyzed for FDER's primary and secondary drinking-water constituents. After one year, the results

should be reviewed and the list of future parameters to be monitored be modified accordingly.

SUMMARY

During the verification study, six sites were studied due to their potential for adversely affecting the environment or human health. Of these six sites, additional work has been proposed for four (three former disposal areas and the McCoy Annex WWTP). No additional studies are recommended for the DRMO site (Site No. 6) and the Lake Baldwin site (Site No. 9) as no environmental or public health impacts from the disposal operations were detected. Table 5 outlines the recommended work plan for the characterization study of the four sites.

TABLE 5. SUMMARY OF WORK PROPOSED FOR THE CHARACTERIZATION FOR THE NTC

SITE & NUMBER	PROPOSED MONITOR WELLS	CHEMICAL ANALYSIS[1/] Ground-Water Samples	CHEMICAL ANALYSIS[1/] Surface-Water Samples	COMMENTS
NTC North Grinder Landfill (Site 1)	0	(4) EPA Priority Pollutants & RADs[2/] in four wells		One year of quarterly samplings. RADs with .45 micron filter
McCoy Annex Landfill (Site 3)	0	(4) Fe, Mn, VOCs[3/] Base-neutral, phenols RADS in 7 wells		One year of quarterly sampling. RADs with .45 micron filter
			(4) Fe, Mn, VOCs Base-neutral, phenols RADs in 4 surface water	One year of quarterly sampling. RADs with .45 micron filter
Old NTC Pesticide Building (Site 8)	1	(4) VOCs, Acid and Base-Neutral extractables, pesticides and herbicides		One year of quarterly sampling in new well and OLM-17 and OLM-18
McCoy Annex WWTD (Site 10)	0	(3) FDER primary and secondary drinking water[4/] parameters in two wells		One year of quarterly monitoring for compliance with Chapter 17-4 FAC

1/ Water-quality samples will be analyzed in the field for pH and specific conductance
2/ RADs - Gross Alpha and Gross Bets
3/ Fe-Iron; Mn-Manganese; VOC by EPA 624; Base-neutral by EPA 625
4/ Except color, corrosivity, foaming agents, and odor

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APPENDIX A

LITHOLOGIC LOGS

LITHOLOGIC LOG FOR MONITOR WELL OLM-1

Description	Depth (ft)	Thickness (ft)
Soil and sand, light gray,.....	0 - 2.0	2.0
Sand, medium-grained, light gray to brown (Shelby tube 8-10 ft).....	2.0 - 14.0	12.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-2

Description	Depth (ft)	Thickness (ft)
Soil and sand, fine-grained, light gray...	0 - 2.0	2.0
Sand, medium-grained, tan to light brown..	2.0 - 14.0	12.0
Sand, silty, fine-grained, dark brown to gray.....	14.0 - 22.0	8.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-3

Description	Depth (ft)	Thickness (ft)
Soil and sand, fine-grained, gray.....	0 - 2.0	2.0
Sand, fine-grained, tan to brown.....	2.0 - 10.0	8.0
Sand, silty, fine-grained, dark brown.	10.0 - 16.0	6.0
Sand, silty, fine to medium-grained, very firm, dark brown.....	16.0 - 22.0	6.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-4

Description	Depth (ft)	Thickness (ft)
Soil and sand, fine-grained, gray.....	0 - 2.0	2.0
Sand, fine-grained, tan to brown.....	2.0 - 13.0	11.0
Sand, silty, fine-grained, dark brown.....	13.0 - 22.0	9.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-5

Description	Depth (ft)	Thickness (ft)
Sand, fine-grained, tan to dark brown, stained.....	0.0 - 6.0	6.0
Sand, medium-grained, dark brown,stained, some shells.....	6.0 - 10.0	4.0
Sand, medium-grained, tan to brown.....	10.0 - 14.0	4.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-6

Description	Depth (ft)	Thickness (ft)
Sand, fine-grained, tan to gray, stained..	0 - 10.0	10.0
Sand, silty, fine-grained, tan to gray, well sorted.....	10.0 - 14.0	4.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-7

Description	Depth (ft)	Thickness (ft)
Soil and sand, fine-grained, gray, stained.	0 - 2.0	2.0
Sand, fine-grained, gray to light brown, stained.....	2.0 - 14.0	12.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-8

Description	Depth (ft)	Thickness (ft)
Soil and sand, fine-grained, dark gray, roots.....	0 - 4.0	4.0
Sand, medium-grained, tan to white.....	4.0 - 6.0	2.0
Sand, silty, fine-grained, dark gray.....	6.0 - 14.0	8.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-9

Description	Depth (ft)	Thickness (ft)
Soil and sand, fine-grained, dark gray.....	0 - 4.0	4.0
Sand, clayey, fine-grained, dark gray.....	4.0 - 10.0	6.0
Sand, silty, fine-grained, brown to tan....	10.0 - 14.0	4.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-10

Description	Depth (ft)	Thickness (ft)
Soil and sand, fine-grained, medium gray...	0 - 4.0	4.0
Sand, clayey, fine to medium-grained, dark brown.....	4.0 - 14.0	10.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-13

Description	Depth (ft)	Thickness (ft)
Soil and sand, tan to light gray.....	0 - 3.0	3.0
Sand, medium-grained, white to light tan...	3.0 - 10.0	7.0
Sand, silty, medium-grained, dark gray to white.....	10.0 - 16.0	6.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-14

Description	Depth (ft)	Thickness (ft)
Asphalt and sand, fine-grained, dark brown stained.....	0 - 2.0	2.0
Sand, fine-grained, light tan to white, stained.....	2.0 - 8.0	6.0
Sand, silty, fine-grained, light tan to brown, some shells.....	8.0 - 10.0	2.0
Sand, medium-grained, white to light tan...	10.0 - 14.0	4.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-15

Description	Depth (ft)	Thickness (ft)
Asphalt and sand, dark brown stained.....	0 - 2.0	2.0
Sand, fine-grained, light tan to white, stained.....	2.0 - 14.0	12.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-16

Description	Depth (ft)	Thickness (ft)
Soil and sand, light gray.....	0 - 2.0	2.0
Sand, medium-grained, light gray.....	2.0 - 4.0	2.0
Sand, clayey, medium to coarse-grained, dark brown.....	4.0 - 14.0	10.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-17

Description	Depth (ft)	Thickness (ft)
Soil and sand, medium-grained, light gray to white.....	0 - 4.0	4.0
Sand, medium to coarse-grained, white to gray, stained.....	4.0 - 14.0	10.0

LITHOLOGIC LOG FOR MONITOR WELL OLM-18

Description	Depth (ft)	Thickness (ft)
Soil, dark gray.....	0 - 2.0	2.0
Sand, slightly clayey, medium to coarse-grained, dark brown.....	2.0 - 14.0	12.0

APPENDIX B

Laboratory Water-Quality and Sediment Analyses Results for Individual Sites

Table B-1. Water-Quality Parameters Measured in the Field

Section 1. NTC North Grinder Landfill (Site No. 1)
Section 2. McCoy Annex Landfill (Site No. 3)
Section 3. DRMO McCoy Annex (Site No. 6)
Section 4. Old NTC Pesticide Building (Site No. 8)
Section 5. Lake Baldwin (Site No. 9)
Section 6. McCoy Annex WWTP (Site No. 10)

Table B-1. Water-Quality Parameters Measured in the Field

Well Number	Site Number	Temperature (°C)	pH (Units)	Specific Conductance (umhos/cm)	Date Sampled
OLM-1	1	26	4.9	75	6-20-86
OLM-2	1	26	5.0	300	6-20-86
OLM-3	1	26	5.4	100	6-20-86
OLM-4	1	26	6.0	90	6-20-86
OLM-5	3	26	5.0	75	6-18-86
OLM-6	10	26	6.0	450	6-18-86
OLM-7	10	26	6.5	1500	6-18-86
OLM-8	3	26	5.0	65	6-18-86
OLM-9	3	25	5.5	110	6-19-86
OLM-10	3	26	5.0	750	6-19-86
OLM-11	3	26	4.8	>50	6-19-86
OLM-12	3	26	5.0	310	6-19-86
OLM-13	3	26	4.9	125	6-18-86
OLM-14	6	26	6.0	180	6-19-86
OLM-15	6	26	5.9	200	6-19-86
OLM-16	8	26	5.0	100	6-20-86
OLM-17	8	26	5.0	175	6-20-86
OLM-18	8	26	5.5	200	6-20-86

Section 1

NTC North Grinder Landfill
(Site No. 1)

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM01
COMPUCHEM SAMPLE NUMBER: 91137

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	310	2.0
PHENOLS	BDL	0.10
CHLORIDE	11	3.0
SULFATE	BDL	30
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.070	0.010
IRON	1.5	0.030
MANGANESE	0.040	0.010

GROSS ALPHA	pci/L	39±15	2.0
GROSS BETA	pci/L	38±13	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM01
COMPUCHEM® SAMPLE NUMBER: 91134

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	86	(77-120)
4-Bromofluorobenzene	98	(85-121)
D_8-Toluene	104	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM01
COMPUCHEM® SAMPLE NUMBER: 91135

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	44	(23-121)
D_5-Phenol	32	(15-103)
2,4,6-Tribromophenol	49	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM01
COMPUCHEM® SAMPLE NUMBER: 91135

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM01
COMPUCHEM® SAMPLE NUMBER: 91135

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3.3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	44	(41-120)
2-Fluorobiphenyl	56	(44-119)
D_{14}-Terphenyl	66	(33-128)
D_{10}-Pyrene*	62	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM01
COMPUCHEM® SAMPLE NUMBER: 91136

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	48	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM02
COMPUCHEM SAMPLE NUMBER: 91141

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	320	2.0
PHENOLS	0.15	0.10
CHLORIDE	16	3.0
SULFATE	68	30
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.020	0.010
IRON	0.060	0.030
MANGANESE	0.010	0.010

GROSS ALPHA	pci/L	24±12	2.0
GROSS BETA	pci/L	36±13	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM02
COMPUCHEM® SAMPLE NUMBER: 91138

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	5.4 J	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	84	(77-120)
4-Bromofluorobenzene	98	(85-121)
D_8-Toluene	108	(86-119)

BDL= BELOW DETECTION LIMIT
J=Estimated concentration; values are between the detection limit and one-half of that limit.

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM02
COMPUCHEM® SAMPLE NUMBER: 91139

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	28	(23-121)
D_5-Phenol	19	(15-103)
2,4,6-Tribromophenol	40	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM02
COMPUCHEM® SAMPLE NUMBER: 91139

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM02
COMPUCHEM® SAMPLE NUMBER: 91139

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	71	(41-120)
2-Fluorobiphenyl	85	(44-119)
D_{14}-Terphenyl	101	(33-128)
D_{10}-Pyrene*	93	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM02
COMPUCHEM® SAMPLE NUMBER: 91140

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	69	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM03
COMPUCHEM SAMPLE NUMBER: 91145

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	140	2.0
PHENOLS	0.16	0.10
CHLORIDE	6.5	3.0
SULFATE	BDL	30
ANTIMONY	BDL	0.20
ARSENIC	0.068	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.010	0.010
IRON	0.13	0.030
MANGANESE	BDL	0.010

GROSS ALPHA	pci/L	41±15	2.0
GROSS BETA	pci/L	29±12	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM03
COMPUCHEM® SAMPLE NUMBER: 91142

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	88	(77-120)
4-Bromofluorobenzene	101	(85-121)
D_8-Toluene	104	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM03
COMPUCHEM® SAMPLE NUMBER: 91143

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	49	(23-121)
D_5-Phenol	38	(15-103)
2,4,6-Tribromophenol	65	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM03
COMPUCHEM® SAMPLE NUMBER: 91143

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: OLM03
COMPUCHEM® SAMPLE NUMBER: 91143

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	73	(41-120)
2-Fluorobiphenyl	93	(44-119)
D_{14}-Terphenyl	106	(33-128)
D_{10}-Pyrene*	104	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM03
COMPUCHEM® SAMPLE NUMBER: 91144

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	68	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM04
COMPUCHEM SAMPLE NUMBER: 91151

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	110	2.0
PHENOLS	0.11	0.10
CHLORIDE	4.3	3.0
SULFATE	BDL	30
ANTIMONY	BDL	0.20
ARSENIC	0.010	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.030	0.010
IRON	0.18	0.030
MANGANESE	0.020	0.010

GROSS ALPHA	pci/L	20±11	2.0
GROSS BETA	pci/L	28±12	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM04
COMPUCHEM® SAMPLE NUMBER: 91146

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	15	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	87	(77-120)
4-Bromofluorobenzene	105	(85-121)
D_8-Toluene	109	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM04
COMPUCHEM® SAMPLE NUMBER: 91149

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	37	(23-121)
D_5-Phenol	27	(15-103)
2,4,6-Tribromophenol	27	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM04
COMPUCHEM® SAMPLE NUMBER: 91149

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM04
COMPUCHEM® SAMPLE NUMBER: 91149

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	65	(41-120)
2-Fluorobiphenyl	65	(44-119)
D_{14}-Terphenyl	80	(33-128)
D_{10}-Pyrene*	78	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM04
COMPUCHEM® SAMPLE NUMBER: 91150

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	93	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

Section 2

McCoy Annex Landfill
(Site No. 3)

COMPOUND LIST -- INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-05
COMPUCHEM SAMPLE NUMBER: 90872

		CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE, TOTAL		BDL	0.30
TOTAL DISSOLVED SOLIDS		470*	2.0
PHENOLS, TOTAL		BDL	0.10
CHLORIDE		*	3.0
SULFATE		*	30
ANTIMONY, TOTAL		BDL	0.20
ARSENIC, TOTAL		BDL	0.005
BERYLLIUM, TOTAL		BDL	0.01
CADMIUM, TOTAL		BDL	0.01
CHROMIUM, TOTAL		BDL	0.03
COPPER, TOTAL		BDL	0.02
LEAD, TOTAL		BDL	0.005
MERCURY, TOTAL		BDL	0.0005
NICKEL, TOTAL		BDL	0.03
SELENIUM, TOTAL		BDL	0.005
SILVER, TOTAL		BDL	0.05
THALLIUM, TOTAL		BDL	0.05
ZINC, TOTAL		0.01	0.01
IRON, TOTAL		0.61	0.03
MANGANESE, TOTAL		BDL	0.01
GROSS ALPHA	pci/L	22±10	2.0
GROSS BETA	pci/L	30±7	3.0

BDL=BELOW DETECTION LIMIT

*Due to the use of an acid preservative, several analyses could not be completed. The reported value for Total Dissolved Solids should be considered an estimated concentration.

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-05
COMPUCHEM® SAMPLE NUMBER: 90624

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	90	(77-120)
4-Bromofluorobenzene	96	(85-121)
D_8-Toluene	96	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM-05
COMPUCHEM® SAMPLE NUMBER: 90625

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	55	(23-121)
D_5-Phenol	38	(15-103)
2,4,6-Tribromophenol	96	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-05
COMPUCHEM® SAMPLE NUMBER: 90625

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM-05
COMPUCHEM® SAMPLE NUMBER: 90625

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	81	(41-120)
2-Fluorobiphenyl	88	(44-119)
D_{14}-Terphenyl	87	(33-128)
D_{10}-Pyrene*	112	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM-05
COMPUCHEM® SAMPLE NUMBER: 90626

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	88	(48-136)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-08
COMPUCHEM SAMPLE NUMBER: 90891

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	98	2.0
PHENOLS	BDL	0.10
CHLORIDE	9.7	3.0
SULFATE	BDL	30
ANTIMONY	BDL	0.20
ARSENIC	0.020	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.040	0.010
IRON	7.4	0.030
MANGANESE	BDL	0.010

GROSS ALPHA	pci/L	210±55	2.0
GROSS BETA	pci/L	137±17	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-08
COMPUCHEM® SAMPLE NUMBER: 90635

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	87	(77-120)
4-Bromofluorobenzene	97	(85-121)
D_8-Toluene	97	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM-08
COMPUCHEM® SAMPLE NUMBER: 90636

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	50	(23-121)
D_5-Phenol	34	(15-103)
2,4,6-Tribromophenol	84	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-08
COMPUCHEM® SAMPLE NUMBER: 90636

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM-08
COMPUCHEM® SAMPLE NUMBER: 90636

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
36B.	3,3'-DICHLOROBENZIDINE	BDL	20
37B.	BENZO(A)ANTHRACENE	BDL	10
38B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
39B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	97	(41-120)
2-Fluorobiphenyl	97	(44-119)
D_{14}-Terphenyl	97	(33-128)
D_{10}-Pyrene*	118	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range.

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM-09
COMPUCHEM® SAMPLE NUMBER: 90894

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	37	(23-121)
D_5-Phenol	25	(15-103)
2,4,6-Tribromophenol	76	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-09
COMPUCHEM® SAMPLE NUMBER: 90894

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM-09
COMPUCHEM® SAMPLE NUMBER: 90894

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	85	(41-120)
2-Fluorobiphenyl	87	(44-119)
D_{14}-Terphenyl	100	(33-128)
D_{10}-Pyrene*	114	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM-09
COMPUCHEM® SAMPLE NUMBER: 90895

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	103	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND-LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-10
COMPUCHEM SAMPLE NUMBER: 90900

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	79	2.0
PHENOLS	0.15	0.10
CHLORIDE	4.8	3.0
SULFATE	BDL	30
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.010	0.010
IRON	1.2	0.030
MANGANESE	0.020	0.010

GROSS ALPHA	pci/L	12±3	2.0
GROSS BETA	pci/L	18±22	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-10
COMPUCHEM® SAMPLE NUMBER: 90897

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	100	(77-120)
4-Bromofluorobenzene	99	(85-121)
D_8-Toluene	103	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM-10
COMPUCHEM® SAMPLE NUMBER: 90898

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	45	(23-121)
D_5-Phenol	33	(15-103)
2,4,6-Tribromophenol	91	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-10
COMPUCHEM® SAMPLE NUMBER: 90898

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: OLM-10
COMPUCHEM® SAMPLE NUMBER: 90898

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
36B.	3,3'-DICHLOROBENZIDINE	BDL	20
37B.	BENZO(A)ANTHRACENE	BDL	10
38B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
39B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	85	(41-120)
2-Fluorobiphenyl	91	(44-119)
D_{14}-Terphenyl	95	(33-128)
D_{10}-Pyrene*	110	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range.

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM-10
COMPUCHEM® SAMPLE NUMBER: 90899

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	87	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-11
COMPUCHEM SAMPLE NUMBER: 90904

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	170	2.0
PHENOLS	BDL	0.10
CHLORIDE	5.4	3.0
SULFATE	BDL	30
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.020	0.010
IRON	9.8	0.030
MANGANESE	1.3	0.010

GROSS ALPHA	pci/L	100±17	2.0
GROSS BETA	pci/L	18±15	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-11
COMPUCHEM® SAMPLE NUMBER: 90901

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	100	(77-120)
4-Bromofluorobenzene	92	(85-121)
D_8-Toluene	97	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM-11
COMPUCHEM® SAMPLE NUMBER: 90902

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	29	(23-121)
D_5-Phenol	22	(15-103)
2,4,6-Tribromophenol	63	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-11
COMPUCHEM® SAMPLE NUMBER: 90902

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM-11
COMPUCHEM® SAMPLE NUMBER: 90902

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
36B.	3,3'-DICHLOROBENZIDINE	BDL	20
37B.	BENZO(A)ANTHRACENE	BDL	10
38B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
39B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	70	(41-120)
2-Fluorobiphenyl	77	(44-119)
D_{14}-Terphenyl	86	(33-128)
D_{10}-Pyrene*	103	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range.

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM-11
COMPUCHEM® SAMPLE NUMBER: 90903

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	88	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-12
COMPUCHEM SAMPLE NUMBER: 90908

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	360	2.0
PHENOLS	BDL	0.10
CHLORIDE	11	3.0
SULFATE	BDL	30
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.080	0.010
IRON	12	0.030
MANGANESE	0.22	0.010

GROSS ALPHA	pci/L	37±7	2.0
GROSS BETA	pci/L	24±12	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-12
COMPUCHEM® SAMPLE NUMBER: 90905

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	7.3 J	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	31	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	36	10
29V.	ETHYLBENZENE	10	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	98	(77-120)
4-Bromofluorobenzene	96	(85-121)
D_8-Toluene	98	(86-119)

BDL= BELOW DETECTION LIMIT
J=Estimated concentration; values are between the detection limit and one-half of that limit.

099999

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM-12
COMPUCHEM® SAMPLE NUMBER: 90906

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	32	(23-121)
D_5-Phenol	23	(15-103)
2,4,6-Tribromophenol	67	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-12
COMPUCHEM® SAMPLE NUMBER: 90906

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	8.3 J	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	16	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT
J=Estimated concentration; values are between the detection limit and one-half of that limit.

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM-12
COMPUCHEM® SAMPLE NUMBER: 90906

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
36B.	3,3'-DICHLOROBENZIDINE	BDL	20
37B.	BENZO(A)ANTHRACENE	BDL	10
38B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
39B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	75	(41-120)
2-Fluorobiphenyl	74	(44-119)
D_{14}-Terphenyl	80	(33-128)
D_{10}-Pyrene*	96	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range.

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM-12
COMPUCHEM® SAMPLE NUMBER: 90907

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	77	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-13
COMPUCHEM SAMPLE NUMBER: 90892

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
TOTAL CYANIDE	BDL	0.30
TOTAL DISSOLVED SOLIDS	420	2.0
PHENOLS	BDL	0.10
CHLORIDE	11	3.0
SULFATE	BDL	30
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.010	0.010
IRON	2.6	0.030
MANGANESE	BDL	0.010

GROSS ALPHA	pci/L	91±16	2.0
GROSS BETA	pci/L	83±15	3.0

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-13
COMPUCHEM® SAMPLE NUMBER: 90638

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	92	(77-120)
4-Bromofluorobenzene	98	(85-121)
D_8-Toluene	100	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM-13
COMPUCHEM® SAMPLE NUMBER: 90639

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	58	(23-121)
D_5-Phenol	37	(15-103)
2,4,6-Tribromophenol	84	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-13
COMPUCHEM® SAMPLE NUMBER: 90639

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM-13
COMPUCHEM® SAMPLE NUMBER: 90639

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
36B.	3,3'-DICHLOROBENZIDINE	BDL	20
37B.	BENZO(A)ANTHRACENE	BDL	10
38B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
39B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	84	(41-120)
2-Fluorobiphenyl	89	(44-119)
D_{14}-Terphenyl	98	(33-128)
D_{10}-Pyrene*	118	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range.

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM-13
COMPUCHEM® SAMPLE NUMBER: 90640

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	88	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST -- INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSD-1
COMPUCHEM SAMPLE NUMBER: 91849

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.050
2. BARIUM, TOTAL	BDL	1.0
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.050
5. LEAD, TOTAL	BDL	0.050
6. MERCURY, TOTAL	BDL	0.00020
7. SELENIUM, TOTAL	BDL	0.010
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: OLSW1
COMPUCHEM SAMPLE NUMBER: 91866

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	1.0	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	BDL	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLSW1
COMPUCHEM® SAMPLE NUMBER: 91863

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	6.7 J	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	93	(77-120)
4-Bromofluorobenzene	95	(85-121)
D_8-Toluene	94	(86-119)

BDL= BELOW DETECTION LIMIT
J=Estimated concentration; values are between the detection limit and one-half of that limit.

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLSW1
COMPUCHEM® SAMPLE NUMBER: 91864

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	48	(23-121)
D_5-Phenol	22	(15-103)
2,4,6-Tribromophenol	70	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLSW1
COMPUCHEM® SAMPLE NUMBER: 91864

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLSW1
COMPUCHEM® SAMPLE NUMBER: 91864

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	55	(41-120)
2-Fluorobiphenyl	54	(44-119)
D_{14}-Terphenyl	78	(33-128)
D_{10}-Pyrene*	83	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSW1
COMPUCHEM® SAMPLE NUMBER: 91865

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	93	(48-136)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSD-2
COMPUCHEM SAMPLE NUMBER: 91850

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.050
2. BARIUM, TOTAL	BDL	1.0
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.050
5. LEAD, TOTAL	BDL	0.050
6. MERCURY, TOTAL	BDL	0.00020
7. SELENIUM, TOTAL	BDL	0.010
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: OLSW2
COMPUCHEM SAMPLE NUMBER: 91862

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	2.5	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	BDL	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLSW2
COMPUCHEM® SAMPLE NUMBER: 91859

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	5.2J	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	96	(77-120)
4-Bromofluorobenzene	100	(85-121)
D_8-Toluene	97	(86-119)

BDL= BELOW DETECTION LIMIT
J=Estimated concentration; values are between the detection limit and one-half of that limit.

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLSW2
COMPUCHEM® SAMPLE NUMBER: 91860

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	47	(23-121)
D_5-Phenol	26	(15-103)
2,4,6-Tribromophenol	79	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLSW2
COMPUCHEM® SAMPLE NUMBER: 91860

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLSW2
COMPUCHEM® SAMPLE NUMBER: 91860

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	54	(41-120)
2-Fluorobiphenyl	55	(44-119)
D_{14}-Terphenyl	70	(33-128)
D_{10}-Pyrene*	70	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND-LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSW2
COMPUCHEM® SAMPLE NUMBER: 91861

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	64	(48-136)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

COMPOUND LIST- -- INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSD-3
COMPUCHEM SAMPLE NUMBER: 91851

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	0.053	0.050
2. BARIUM, TOTAL	BDL	1.0
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.050
5. LEAD, TOTAL	BDL	0.050
6. MERCURY, TOTAL	BDL	0.00020
7. SELENIUM, TOTAL	BDL	0.010
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: OLSW3
COMPUCHEM SAMPLE NUMBER: 91876

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	1.6	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	BDL	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLSW3
COMPUCHEM® SAMPLE NUMBER: 91873

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	91	(77-120)
4-Bromofluorobenzene	96	(85-121)
D_8-Toluene	93	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLSW3
COMPUCHEM® SAMPLE NUMBER: 91874

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	51	(23-121)
D_5-Phenol	32	(15-103)
2,4,6-Tribromophenol	64	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLSW3
COMPUCHEM® SAMPLE NUMBER: 91874

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLSW3
COMPUCHEM® SAMPLE NUMBER: 91874

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	60	(41-120)
2-Fluorobiphenyl	63	(44-119)
D_{14}-Terphenyl	78	(33-128)
D_{10}-Pyrene*	77	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSW3
COMPUCHEM® SAMPLE NUMBER: 91875

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	111	(48-136)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

Section 3

DRMO McCoy Annex

(Site No. 6)

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-14
COMPUCHEM® SAMPLE NUMBER: 90909

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	9.6 J	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

rogate Recoveries - Introduced at the instrument, volatile surrogate standards
iterated and/or select compounds that analytically mimic the response of
analytes. Known concentrations of these surrogates are added to the
e and a percent recovery is calculated. This recovery acts as a barometer of
efficiency for the individual sample.

	% Recovery	Control Range%
- ichloroethane	99	(77-120)
luorobenzene	93	(85-121)
ene	98	(86-119)

LOW DETECTION LIMIT
oncentration; values are between the detection limit and one-half of

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COMPOUND LIST - -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-14
COMPUCHEM® SAMPLE NUMBER: 90912

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -= BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM-14
COMPUCHEM® SAMPLE NUMBER: 90912

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	42	(41-120)
2-Fluorobiphenyl	58	(44-119)
D_{14}-Terphenyl	93	(33-128)
D_{10}-Pyrene*	93	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM-14
COMPUCHEM® SAMPLE NUMBER: 90913

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	88	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-14
COMPUCHEM SAMPLE NUMBER: 90916

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	BDL	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	0.050	0.020
LEAD	0.014	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.61	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-15
COMPUCHEM® SAMPLE NUMBER: 90917

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	8.2J	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	99	(77-120)
4-Bromofluorobenzene	91	(85-121)
D_8-Toluene	98	(86-119)

BDL= BELOW DETECTION LIMIT
J=Estimated concentration; values are between the detection limit and one-half of that limit.

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM-15
COMPUCHEM® SAMPLE NUMBER: 90918

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	54	(23-121)
D_5-Phenol	46	(15-103)
2,4,6-Tribromophenol	78	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST - -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM-15
COMPUCHEM® SAMPLE NUMBER: 90918

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM-15
COMPUCHEM® SAMPLE NUMBER: 90918

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	84	(41-120)
2-Fluorobiphenyl	94	(44-119)
D_{14}-Terphenyl	126	(33-128)
D_{10}-Pyrene*	114	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM-15
COMPUCHEM® SAMPLE NUMBER: 90920

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	89	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

SAMPLE IDENTIFIER: OLM-15
COMPUCHEM SAMPLE NUMBER: 90922

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	BDL	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	0.013	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.040	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSS-1
COMPUCHEM SAMPLE NUMBER: 89567

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.0050
2. BARIUM, TOTAL	BDL	0.20
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.030
5. LEAD, TOTAL	BDL	0.0050
6. MERCURY, TOTAL	0.00080	0.00050
7. SELENIUM, TOTAL	BDL	0.0050
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSS-1
COMPUCHEM® SAMPLE NUMBER: 89568

		CONCENTRATION (UG/KG)	DETECTION LIMIT (UG/KG)
1P.	ALDRIN	BDL	2.0
2P.	ALPHA-BHC	BDL	2.0
3P.	BETA-BHC	BDL	2.0
4P.	GAMMA-BHC	BDL	2.0
5P.	DELTA-BHC	BDL	2.0
6P.	CHLORDANE (TECHNICAL)	BDL	10
7P.	4,4'-DDT	BDL	2.0
8P.	4,4'-DDE	BDL	2.0
9P.	4,4'-DDD	BDL	2.0
10P.	DIELDRIN	BDL	2.0
11P.	ALPHA-ENDOSULFAN	BDL	2.0
12P.	BETA-ENDOSULFAN	BDL	2.0
13P.	ENDOSULFAN SULFATE	BDL	2.0
14P.	ENDRIN	BDL	2.0
15P.	ENDRIN ALDEHYDE	BDL	2.0
16P.	HEPTACHLOR	BDL	2.0
17P.	HEPTACHLOR EPOXIDE	BDL	2.0
18P.	PCB-1242	BDL	20
19P.	PCB-1254	BDL	20
20P.	PCB-1221	BDL	20
21P.	PCB-1232	BDL	20
22P.	PCB-1248	BDL	20
23P.	PCB-1260	BDL	20
24P.	PCB-1016	BDL	20
25P.	TOXAPHENE	BDL	20

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	88	20-150*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSS-2
COMPUCHEM SAMPLE NUMBER: 89569

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.0050
2. BARIUM, TOTAL	BDL	0.20
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.030
5. LEAD, TOTAL	BDL	0.0050
6. MERCURY, TOTAL	0.0012	0.00050
7. SELENIUM, TOTAL	BDL	0.0050
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSS-2
COMPUCHEM® SAMPLE NUMBER: 89570

		CONCENTRATION (UG/KG)	DETECTION LIMIT (UG/KG)
1P.	ALDRIN	BDL	2.0
2P.	ALPHA-BHC	BDL	2.0
3P.	BETA-BHC	BDL	2.0
4P.	GAMMA-BHC	BDL	2.0
5P.	DELTA-BHC	BDL	2.0
6P.	CHLORDANE (TECHNICAL)	BDL	10
7P.	4,4'-DDT	BDL	2.0
8P.	4,4'-DDE	BDL	2.0
9P.	4,4'-DDD	BDL	2.0
10P.	DIELDRIN	BDL	2.0
11P.	ALPHA-ENDOSULFAN	BDL	2.0
12P.	BETA-ENDOSULFAN	BDL	2.0
13P.	ENDOSULFAN SULFATE	BDL	2.0
14P.	ENDRIN	BDL	2.0
15P.	ENDRIN ALDEHYDE	BDL	2.0
16P.	HEPTACHLOR	BDL	2.0
17P.	HEPTACHLOR EPOXIDE	BDL	2.0
18P.	PCB-1242	BDL	20
19P.	PCB-1254	BDL	20
20P.	PCB-1221	BDL	20
21P.	PCB-1232	BDL	20
22P.	PCB-1248	BDL	20
23P.	PCB-1260	BDL	20
24P.	PCB-1016	BDL	20
25P.	TOXAPHENE	BDL	20

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	52	(20-150)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSS-3
COMPUCHEM SAMPLE NUMBER: 89571

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.0050
2. BARIUM, TOTAL	BDL	0.20
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.030
5. LEAD, TOTAL	BDL	0.0050
6. MERCURY, TOTAL	BDL	0.00050
7. SELENIUM, TOTAL	BDL	0.0050
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSS-3
COMPUCHEM® SAMPLE NUMBER: 89572

		CONCENTRATION (UG/KG)	DETECTION LIMIT (UG/KG)
1P.	ALDRIN	BDL	2.0
2P.	ALPHA-BHC	BDL	2.0
3P.	BETA-BHC	BDL	2.0
4P.	GAMMA-BHC	BDL	2.0
5P.	DELTA-BHC	BDL	2.0
6P.	CHLORDANE (TECHNICAL)	BDL	10
7P.	4,4'-DDT	BDL	2.0
8P.	4,4'-DDE	BDL	2.0
9P.	4,4'-DDD	BDL	2.0
10P.	DIELDRIN	BDL	2.0
11P.	ALPHA-ENDOSULFAN	BDL	2.0
12P.	BETA-ENDOSULFAN	BDL	2.0
13P.	ENDOSULFAN SULFATE	BDL	2.0
14P.	ENDRIN	BDL	2.0
15P.	ENDRIN ALDEHYDE	BDL	2.0
16P.	HEPTACHLOR	BDL	2.0
17P.	HEPTACHLOR EPOXIDE	BDL	2.0
18P.	PCB-1242	BDL	20
19P.	PCB-1254	BDL	20
20P.	PCB-1221	BDL	20
21P.	PCB-1232	BDL	20
22P.	PCB-1248	BDL	20
23P.	PCB-1260	BDL	20
24P.	PCB-1016	BDL	20
25P.	TOXAPHENE	BDL	20

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	79	20-150*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSS-4
COMPUCHEM SAMPLE NUMBER: 89573

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.0050
2. BARIUM, TOTAL	BDL	0.20
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.030
5. LEAD, TOTAL	BDL	0.0050
6. MERCURY, TOTAL	BDL	0.00050
7. SELENIUM, TOTAL	BDL	0.0050
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSS-4
COMPUCHEM® SAMPLE NUMBER: 89574

		CONCENTRATION (UG/KG)	DETECTION LIMIT (UG/KG)
1P.	ALDRIN	BDL	2.0
2P.	ALPHA-BHC	BDL	2.0
3P.	BETA-BHC	BDL	2.0
4P.	GAMMA-BHC	BDL	2.0
5P.	DELTA-BHC	BDL	2.0
6P.	CHLORDANE (TECHNICAL)	BDL	10
7P.	4,4'-DDT	BDL	2.0
8P.	4,4'-DDE	BDL	2.0
9P.	4,4'-DDD	BDL	2.0
10P.	DIELDRIN	BDL	2.0
11P.	ALPHA-ENDOSULFAN	BDL	2.0
12P.	BETA-ENDOSULFAN	BDL	2.0
13P.	ENDOSULFAN SULFATE	BDL	2.0
14P.	ENDRIN	BDL	2.0
15P.	ENDRIN ALDEHYDE	BDL	2.0
16P.	HEPTACHLOR	BDL	2.0
17P.	HEPTACHLOR EPOXIDE	BDL	2.0
18P.	PCB-1242	BDL	20
19P.	PCB-1254	BDL	20
20P.	PCB-1221	BDL	20
21P.	PCB-1232	BDL	20
22P.	PCB-1248	BDL	20
23P.	PCB-1260	BDL	20
24P.	PCB-1016	BDL	20
25P.	TOXAPHENE	BDL	20

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	61	(20-150)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

Section 4

Old NTC Pesticide Building

(Site No. 8)

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM16
COMPUCHEM® SAMPLE NUMBER: 91152

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	78	(77-120)
4-Bromofluorobenzene	94	(85-121)
D_8-Toluene	94	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM16
COMPUCHEM® SAMPLE NUMBER: 91153

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	33	(23-121)
D_5-Phenol	27	(15-103)
2,4,6-Tribromophenol	26	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM16
COMPUCHEM® SAMPLE NUMBER: 91153

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM16
COMPUCHEM® SAMPLE NUMBER: 91153

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	63	(41-120)
2-Fluorobiphenyl	75	(44-119)
D_{14}-Terphenyl	106	(33-128)
D_{10}-Pyrene*	87	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM16
COMPUCHEM® SAMPLE NUMBER: 91154

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	91	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM16
COMPUCHEM SAMPLE NUMBER: 91155

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	BDL	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.030	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM17
COMPUCHEM® SAMPLE NUMBER: 91156

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	96	(77-120)
4-Bromofluorobenzene	113	(85-121)
D_8-Toluene	113	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM17
COMPUCHEM® SAMPLE NUMBER: 91157

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	51	(23-121)
D_5-Phenol	34	(15-103)
2,4,6-Tribromophenol	72	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM17
COMPUCHEM® SAMPLE NUMBER: 91157

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM17
COMPUCHEM® SAMPLE NUMBER: 91157

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	6J	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	68	(41-120)
2-Fluorobiphenyl	75	(44-119)
D_{14}-Terphenyl	80	(33-128)
D_{10}-Pyrene*	102	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range
J=Estimated concentration; values are between the detection limit and one-half of that limit.

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM17
COMPUCHEM® SAMPLE NUMBER: 91158

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	76	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM17
COMPUCHEM SAMPLE NUMBER: 91159

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	BDL	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.020	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM18
COMPUCHEM® SAMPLE NUMBER: 91160

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	13	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	89	(77-120)
4-Bromofluorobenzene	105	(85-121)
D_8-Toluene	106	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLM18
COMPUCHEM® SAMPLE NUMBER: 91161

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	7J	10
2A.	2-CHLOROPHENOL	7J	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	33	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	85	(23-121)
D_5-Phenol	54	(15-103)
2,4,6-Tribromophenol	120	(10-130)

BDL= BELOW DETECTION LIMIT
J=Estimated concentration; values are between the detection limit and one-half of that limit.

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLM18
COMPUCHEM® SAMPLE NUMBER: 91161

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	26	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLM18
COMPUCHEM® SAMPLE NUMBER: 91161

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	82	(41-120)
2-Fluorobiphenyl	86	(44-119)
D_{14}-Terphenyl	84	(33-128)
D_{10}-Pyrene*	106	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLM18
COMPUCHEM® SAMPLE NUMBER: 91162

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	7.0	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	101	(48-136)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM18
COMPUCHEM SAMPLE NUMBER: 91163

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	0.19	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	0.010	0.010

BDL = BELOW DETECTION LIMITS

Section 5

Lake Baldwin
(Site No. 9)

COMPOUND LIST - -- INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSD-5
COMPUCHEM SAMPLE NUMBER: 91853

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.050
2. BARIUM, TOTAL	BDL	1.0
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.050
5. LEAD, TOTAL	BDL	0.050
6. MERCURY, TOTAL	BDL	0.00020
7. SELENIUM, TOTAL	BDL	0.010
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - CLASSICAL PARAMETERS

SAMPLE IDENTIFIER: OLSD-5
COMPUCHEM SAMPLE NUMBER: 91856

	CONCENTRATION (UG/G)	DETECTION LIMIT (UG/G)
1. CYANIDE, TOTAL	BDL	0.10

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLSW5A
COMPUCHEM® SAMPLE NUMBER: 91870

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	115	(77-120)
4-Bromofluorobenzene	98	(85-121)
D_8-Toluene	111	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLSW5B
COMPUCHEM® SAMPLE NUMBER: 91871

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	113	(77-120)
4-Bromofluorobenzene	98	(85-121)
D_8-Toluene	106	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLSW5C
COMPUCHEM® SAMPLE NUMBER: 91872

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	106	(77-120)
4-Bromofluorobenzene	95	(85-121)
D_8-Toluene	100	(86-119)

BDL= BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: OLSW5
COMPUCHEM SAMPLE NUMBER: 91868

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	1.2	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	BDL	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSW5
COMPUCHEM® SAMPLE NUMBER: 91867

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	.10	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range%
Dibutylchlorendate	113	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLSW5
COMPUCHEM® SAMPLE NUMBER: 91869

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	50	(23-121)
D_5-Phenol	35	(15-103)
2,4,6-Tribromophenol	70	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLSW5
COMPUCHEM® SAMPLE NUMBER: 91869

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLSW5
COMPUCHEM® SAMPLE NUMBER: 91869

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	58	(41-120)
2-Fluorobiphenyl	62	(44-119)
D_{14}-Terphenyl	78	(33-128)
D_{10}-Pyrene*	77	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST_ -- INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSD-6
COMPUCHEM SAMPLE NUMBER: 91854

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.050
2. BARIUM, TOTAL	BDL	1.0
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.050
5. LEAD, TOTAL	BDL	0.050
6. MERCURY, TOTAL	BDL	0.00020
7. SELENIUM, TOTAL	BDL	0.010
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - CLASSICAL PARAMETERS

SAMPLE IDENTIFIER: OLSD-6
COMPUCHEM SAMPLE NUMBER: 91857

	CONCENTRATION (UG/G)	DETECTION LIMIT (UG/G)
1. CYANIDE, TOTAL	BDL	0.10

BDL = BELOW DETECTION LIMITS

COMPOUND LIST -- INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSD-7
COMPUCHEM SAMPLE NUMBER: 91855

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.050
2. BARIUM, TOTAL	BDL	1.0
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.050
5. LEAD, TOTAL	BDL	0.050
6. MERCURY, TOTAL	BDL	0.00020
7. SELENIUM, TOTAL	BDL	0.010
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

COMPOUND LIST - CLASSICAL PARAMETERS

SAMPLE IDENTIFIER: OLSD-7
COMPUCHEM SAMPLE NUMBER: 91858

	CONCENTRATION (UG/G)	DETECTION LIMIT (UG/G)
1. CYANIDE, TOTAL	BDL	0.10

BDL = BELOW DETECTION LIMITS

Section 6

McCoy Annex WWTP
(Site No. 10)

COMPOUND-LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-06
COMPUCHEM SAMPLE NUMBER: 90643

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
NITRATE AS N	BDL	1.0
SODIUM	39	0.010
FLUORIDE	0.10	0.10
CHLORIDE	39	3.0
TOTAL DISSOLVED SOLIDS	330	2.0
SULFATE	83	3.0
PHENOLS	BDL	0.10
ARSENIC	0.025	0.0050
BARIUM	BDL	0.020
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
IRON	4.8	0.030
MANGANESE	0.030	0.010
ZINC	0.070	

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-06
COMPUCHEM® SAMPLE NUMBER: 90629

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	92	(77-120)
4-Bromofluorobenzene	104	(85-121)
D_8-Toluene	97	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST - RCRA/SDWA PESTICIDES

SAMPLE IDENTIFIER: OLM-06
COMPUCHEM SAMPLE NUMBER: 90627

RCRA/SDWA-PESTICIDES	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ENDRIN	BDL	0.00020
2. LINDANE (GAMMA-BHC)-	BDL	0.0040
3. TOXAPHENE	BDL	0.0050
4. METHOXYCHLOR	BDL	0.10

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	86	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - RCRA/SCWA HERBICIDES

SAMPLE IDENTIFIER: OLM-06
COMPUCHEM SAMPLE NUMBER: 90628

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. 2,4-D	BDL	0.10
2. 2,4,5-TP(Silvex)	BDL	0.010
3. 2,4,5-T	BDL	0.010

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
2,4-DB	107	(28-104)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLM-07
COMPUCHEM SAMPLE NUMBER: 90644

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
NITRATE AS N	32	1.0
SODIUM	43	0.010
FLUORIDE	BDL	0.10
CHLORIDE	42	3.0
TOTAL DISSOLVED SOLIDS	1100	2.0
SULFATE	340	3.0
PHENOLS	BDL	0.10
ARSENIC	BDL	0.0050
BARIUM	BDL	0.020
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	BDL	0.0050
MERCURY	BDL	0.00050
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
IRON	0.080	0.030
MANGANESE	0.17	0.010
ZINC	0.010	

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLM-07
COMPUCHEM® SAMPLE NUMBER: 90634

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	90	(77-120)
4-Bromofluorobenzene	98	(85-121)
D_8-Toluene	95	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST - RCRA/SDWA PESTICIDES

SAMPLE IDENTIFIER: OLM-07
COMPUCHEM SAMPLE NUMBER: 90632

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ENDRIN	BDL	0.00020
2. LINDANE (GAMMA-BHC)-	BDL	0.0040
3. TOXAPHENE	BDL	0.0050
4. METHOXYCHLOR	BDL	0.10

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	78	(48-136)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST - RCRA/SCWA HERBICIDES

SAMPLE IDENTIFIER: OLM-07
COMPUCHEM SAMPLE NUMBER: 90633

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. 2,4-D	BDL	0.10
2. 2,4,5-TP(Silvex)	BDL	0.010
3. 2,4,5-T	BDL	0.010

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
2,4-DB	111	(28-104)*

BDL=BELOW DETECTION LIMIT
*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

COMPOUND LIST -- INORGANICS PRIORITY POLLUTANTS

SAMPLE IDENTIFIER: OLSD-4
COMPUCHEM SAMPLE NUMBER: 91852

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
1. ARSENIC, TOTAL	BDL	0.050
2. BARIUM, TOTAL	BDL	1.0
3. CADMIUM, TOTAL	BDL	0.010
4. CHROMIUM, TOTAL	BDL	0.050
5. LEAD, TOTAL	BDL	0.050
6. MERCURY, TOTAL	BDL	0.00020
7. SELENIUM, TOTAL	BDL	0.010
8. SILVER, TOTAL	BDL	0.050

BDL=BELOW DETECTION LIMIT

SAMPLE IDENTIFIER: OLSW4
COMPUCHEM SAMPLE NUMBER: 91880

	CONCENTRATION (MG/L)	DETECTION LIMIT (MG/L)
CYANIDE	BDL	0.30
PHENOLS	3.4	0.10
ANTIMONY	BDL	0.20
ARSENIC	BDL	0.0050
BERYLLIUM	BDL	0.010
CADMIUM	BDL	0.010
CHROMIUM	BDL	0.030
COPPER	BDL	0.020
LEAD	0.012	0.0050
MERCURY	BDL	0.00050
NICKEL	BDL	0.030
SELENIUM	BDL	0.0050
SILVER	BDL	0.050
THALLIUM	BDL	0.050
ZINC	BDL	0.010

BDL = BELOW DETECTION LIMITS

COMPOUND LIST - VOLATILE ORGANICS

SAMPLE IDENTIFIER: OLSW4
COMPUCHEM® SAMPLE NUMBER: 91877

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1V.	CHLOROMETHANE	BDL	10
2V.	BROMOMETHANE	BDL	10
3V.	VINYL CHLORIDE	BDL	10
4V.	CHLOROETHANE	BDL	10
5V.	METHYLENE CHLORIDE	BDL	10
6V.	ACROLEIN	BDL	100
7V.	ACRYLONITRILE	BDL	100
8V.	1,1-DICHLOROETHYLENE	BDL	10
9V.	1,1-DICHLOROETHANE	BDL	10
10V.	TRANS-1,2-DICHLOROETHYLENE	BDL	10
11V.	CHLOROFORM	BDL	10
12V.	1,2-DICHLOROETHANE	BDL	10
13V.	1,1,1-TRICHLOROETHANE	BDL	10
14V.	CARBON TETRACHLORIDE	BDL	10
15V.	BROMODICHLOROMETHANE	BDL	10
16V.	1,2-DICHLOROPROPANE	BDL	10
17V.	TRANS-1,3-DICHLOROPROPENE	BDL	10
18V.	TRICHLOROETHYLENE	BDL	10
19V.	DIBROMOCHLOROMETHANE	BDL	10
20V.	1,1,2-TRICHLOROETHANE	BDL	10
21V.	BENZENE	BDL	10
22V.	CIS-1,3-DICHLOROPROPENE	BDL	10
23V.	2-CHLOROETHYL VINYL ETHER	BDL	10
24V.	BROMOFORM	BDL	10
25V.	1,1,2,2-TETRACHLOROETHYLENE	BDL	10
26V.	1,1,2,2-TETRACHLOROETHANE	BDL	10
27V.	TOLUENE	BDL	10
28V.	CHLOROBENZENE	BDL	10
29V.	ETHYLBENZENE	BDL	10

Surrogate Recoveries - Introduced at the instrument, volatile surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of method efficiency for the individual sample.

	% Recovery	Control Range%
D_4-1,2-Dichloroethane	100	(77-120)
4-Bromofluorobenzene	107	(85-121)
D_8-Toluene	100	(86-119)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: OLSW4
COMPUCHEM® SAMPLE NUMBER: 91878

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1B.	N-NITROSODIMETHYLAMINE	BDL	10
2B.	BIS (2-CHLOROETHYL) ETHER	BDL	10
3B.	1,3-DICHLOROBENZENE	BDL	10
4B.	1,4-DICHLOROBENZENE	BDL	10
5B.	1,2-DICHLOROBENZENE	BDL	10
6B.	BIS (2-CHLOROISOPROPYL) ETHER	BDL	10
7B.	N-NITROSODI-N-PROPYLAMINE	BDL	10
8B.	HEXACHLOROETHANE	BDL	10
9B.	NITROBENZENE	BDL	10
10B.	ISOPHORONE	BDL	10
11B.	BIS(2-CHLOROETHOXY) METHANE	BDL	10
12B.	1,2,4-TRICHLOROBENZENE	BDL	10
13B.	NAPHTHALENE	BDL	10
14B.	HEXACHLOROBUTADIENE	BDL	10
15B.	HEXACHLOROCYCLOPENTADIENE	BDL	10
16B.	2-CHLORONAPHTHALENE	BDL	10
17B.	DIMETHYLPHTHALATE	BDL	10
18B.	ACENAPHTHYLENE	BDL	10
19B.	2,6-DINITROTOLUENE	BDL	10
20B.	ACENAPHTHENE	BDL	10
21B.	2,4-DINITROTOLUENE	BDL	10
22B.	DIETHYLPHTHALATE	BDL	10
23B.	4-CHLOROPHENYL PHENYL ETHER	BDL	10
24B.	FLUORENE	BDL	10
25B.	DIPHENYLAMINE (N-NITROSO)	BDL	10
26B.	1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	BDL	10
27B.	4-BROMOPHENYL PHENYL ETHER	BDL	10
28B.	HEXACHLOROBENZENE	BDL	10

(Continued)

BDL=BELOW DETECTION LIMIT

COMPOUND LIST -- ACID EXTRACTABLES

SAMPLE IDENTIFIER: OLSW4
COMPUCHEM® SAMPLE NUMBER: 91878

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1A.	PHENOL	BDL	10
2A.	2-CHLOROPHENOL	BDL	10
3A.	2-NITROPHENOL	BDL	10
4A.	2,4-DIMETHYLPHENOL	BDL	10
5A.	2,4-DICHLOROPHENOL	BDL	10
6A.	P-CHLORO-M-CRESOL	BDL	10
7A.	2,4,6-TRICHLOROPHENOL	BDL	10
8A.	2,4-DINITROPHENOL	BDL	50
9A.	4-NITROPHENOL	BDL	50
10A.	4,6-DINITRO-O-CRESOL	BDL	50
11A.	PENTACHLOROPHENOL	BDL	50

Surrogate Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
2-Fluorophenol	44	(23-121)
D_5-Phenol	25	(15-103)
2,4,6-Tribromophenol	60	(10-130)

BDL= BELOW DETECTION LIMIT

COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES (Page Two)

SAMPLE IDENTIFIER: OLSW4
COMPUCHEM® SAMPLE NUMBER: 91878

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
29B.	PHENANTHRENE	BDL	10
30B.	ANTHRACENE	BDL	10
31B.	DI-N-BUTYLPHTHALATE	BDL	10
32B.	FLUORANTHENE	BDL	10
33B.	PYRENE	BDL	10
34B.	BENZIDINE	BDL	50
35B.	BUTYLBENZYLPHTHALATE	BDL	10
37B.	3,3'-DICHLOROBENZIDINE	BDL	20
36B.	BENZO(A)ANTHRACENE	BDL	10
39B.	BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10
38B.	CHRYSENE	BDL	10
40B.	DI-N-OCTYLPHTHALATE	BDL	10
41B.	BENZO(B)FLUORANTHENE	BDL	10
42B.	BENZO(K)FLUORANTHENE	BDL	10
43B.	BENZO(A)PYRENE	BDL	10
44B.	INDENO(1,2,3-C,D)PYRENE	BDL	10
45B.	DIBENZO(A,H)ANTHRACENE	BDL	10
46B.	BENZO(G,H,I)PERYLENE	BDL	10

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	%Recovery	Control Range%
D_5-Nitrobenzene	61	(41-120)
2-Fluorobiphenyl	58	(44-119)
D_{14}-Terphenyl	71	(33-128)
D_{10}-Pyrene*	72	*

BDL=BELOW DETECTION LIMIT
*Advisory Surrogate; therefore no control range

COMPOUND LIST -- PESTICIDES/PCBs

SAMPLE IDENTIFIER: OLSW4
COMPUCHEM® SAMPLE NUMBER: 91879

		CONCENTRATION (UG/L)	DETECTION LIMIT (UG/L)
1P.	ALDRIN	BDL	0.10
2P.	ALPHA-BHC	BDL	0.10
3P.	BETA-BHC	BDL	0.10
4P.	GAMMA-BHC	BDL	0.10
5P.	DELTA-BHC	BDL	0.10
6P.	CHLORDANE (TECHNICAL)	BDL	0.50
7P.	4,4'-DDT	BDL	0.10
8P.	4,4'-DDE	BDL	0.10
9P.	4,4'-DDD	BDL	0.10
10P.	DIELDRIN	BDL	0.10
11P.	ALPHA-ENDOSULFAN	BDL	0.10
12P.	BETA-ENDOSULFAN	BDL	0.10
13P.	ENDOSULFAN SULFATE	BDL	0.10
14P.	ENDRIN	BDL	0.10
15P.	ENDRIN ALDEHYDE	BDL	0.10
16P.	HEPTACHLOR	BDL	0.10
17P.	HEPTACHLOR EPOXIDE	BDL	0.10
18P.	PCB-1242	BDL	1.0
19P.	PCB-1254	BDL	1.0
20P.	PCB-1221	BDL	1.0
21P.	PCB-1232	BDL	1.0
22P.	PCB-1248	BDL	1.0
23P.	PCB-1260	BDL	1.0
24P.	PCB-1016	BDL	1.0
25P.	TOXAPHENE	BDL	1.0

Surrogate Recovery - Introduced at the beginning of the extraction, the surrogate standard is a select compound that analytically mimics the response of certain analytes. A known concentration of this surrogate is added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	% Recovery	Control Range %
Dibutylchlorendate	68	(48-136)*

*Advisory surrogate; with the exception of dilutions recovery below 10% requires action step (re-extraction and re-analysis).

BDL=BELOW DETECTION LIMIT

APPENDIX C

Laboratory Permeability Results and Grain-Size Distribution Curves

PTL-INSPECTORATE INC.
NATIONWIDE AND INTERNATIONAL SERVICES

TAMPA DISTRICT

July 9, 1986

PTL Ref: TAM-2536

Geraghty & Miller, Inc.
P.O. Box 271173
Tampa, FL 33688-1173

Attn: James E. Furr

Ref: Laboratory Soils Tests
Orlando Naval Training Center
G&M Project #T02900L1

Dear Mr. Furr:

As per your letter of request, dated June 23, 1986, we have completed permeability tests and grain size analysis tests on samples designated in your letter. Because the sample from 12'-14' in OLM-8 was not available, you requested that the sample from 10'-12' be tested instead.

Permeability tests were performed on the following undisturbed samples with the coefficient of permeability also indicated.

BORING NUMBER	DEPTH	PERMEABILITY
OLM-1	8'-10'	1.92×10^{-5} cm/sec.
OLM-16	8'-10'	3.12×10^{-4} cm/sec.

The results of the grain size analyses are shown graphically on the attached sheets. Please call the writer if you have any questions.

Respectfully submitted,

Joseph A. Eduardo

Joseph A. Eduardo, P.E.
Fla. Reg. #33318
District Engineer

JAE/at

Attachment

JAE
67-14-58

100103

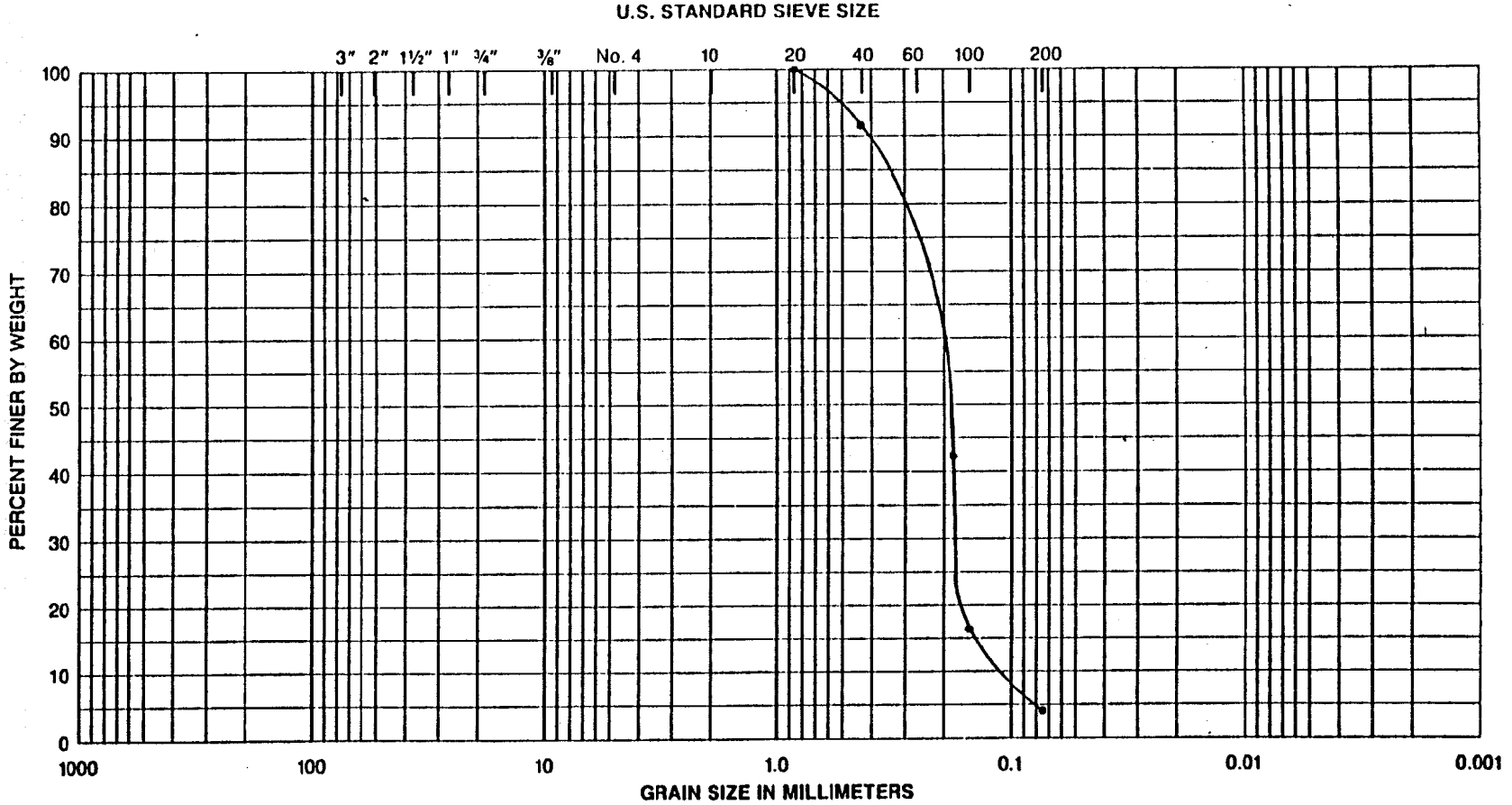
512 N. DELAWARE AVENUE • TAMPA, FLORIDA 33606 • TEL: 813-253-3485 • FAX: 813-251-2936

Pittsburgh Testing Laboratory

GRAIN SIZE DISTRIBUTION CURVE

ORDER NO. TAM-2536

CLIENT: Geraghty & Miller



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

TEST BORING NO.	SAMPLE NO.	DEPTH FT.	LINE	GROUP SYM.	CLASSIFICATION	IN-SITU WC	LL	PL	PI	Gs	REMARKS	PLOTTED BY:
OLM2	10	18'-20'	——	SP	Fine SAND							JFE
			– –									
			–·–									
			–··–									

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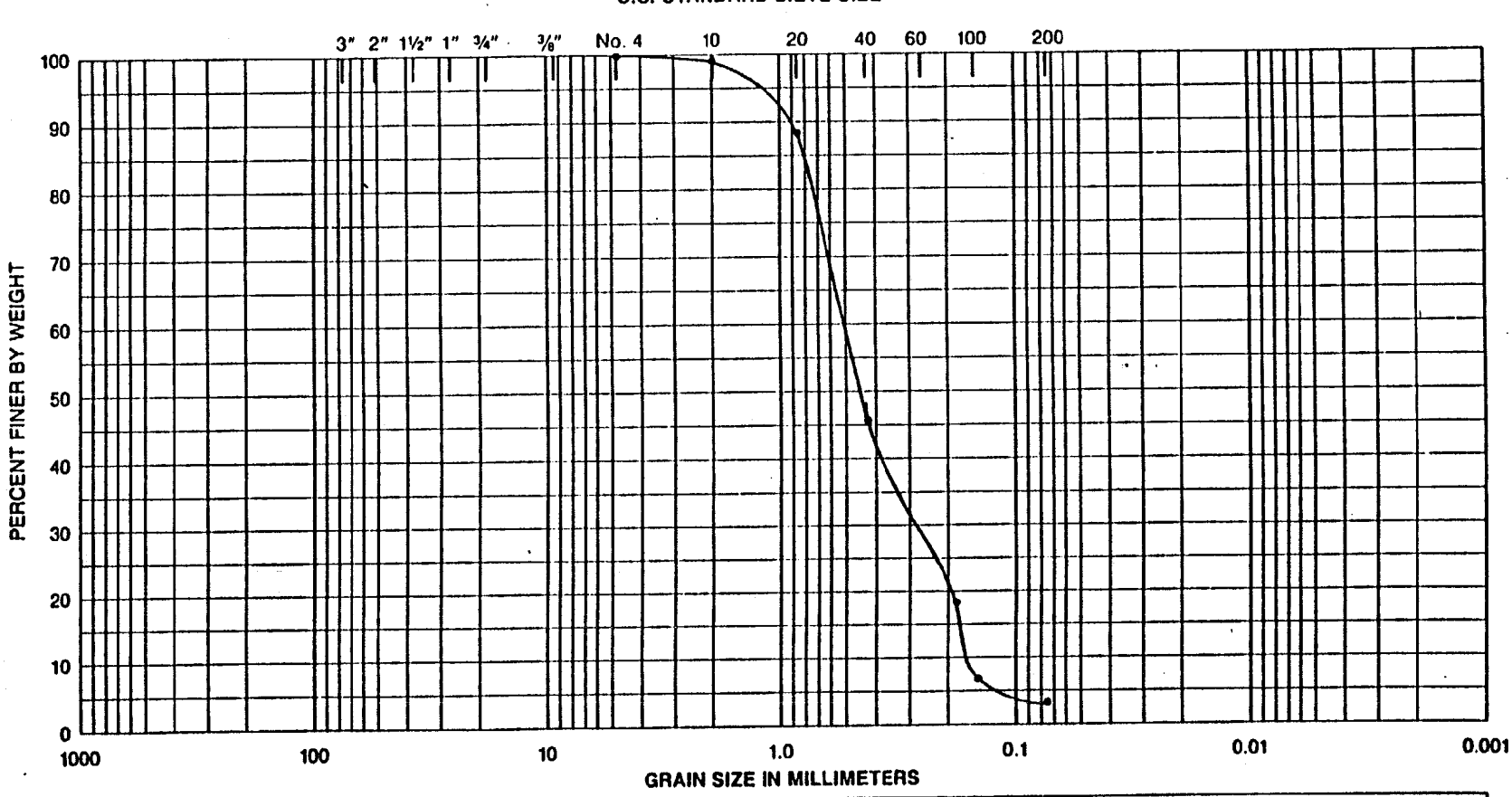
Pittsburgh Testing Laboratory

GRAIN SIZE DISTRIBUTION CURVE

ORDER NO. TAM-2536

CLIENT: Geraghty & Miller



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

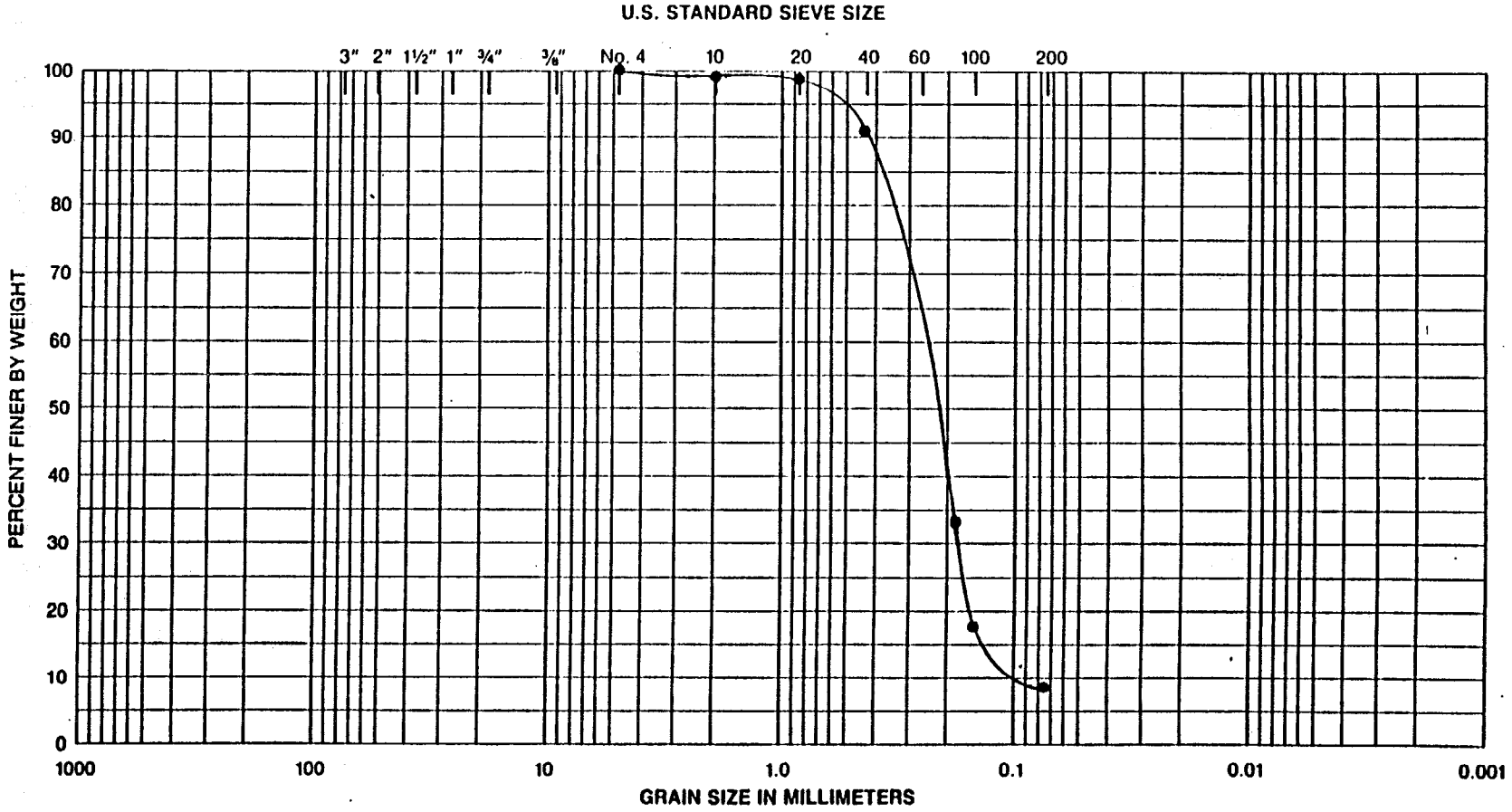
TEST BORING NO.	SAMPLE NO.	DEPTH FT.	LINE	GROUP SYM.	CLASSIFICATION	IN-SITU WC	LL	PL	PI	Gs	REMARKS	PLOTTED BY:
OLM3	9	18'-20'	——	SP	Fine to Medium							JFE
			– –		SAND							
			–·–									
			–··–									

Pittsburgh Testing Laboratory

GRAIN SIZE DISTRIBUTION CURVE

ORDER NO. TAM-2536

CLIENT: Geraghty & Miller



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

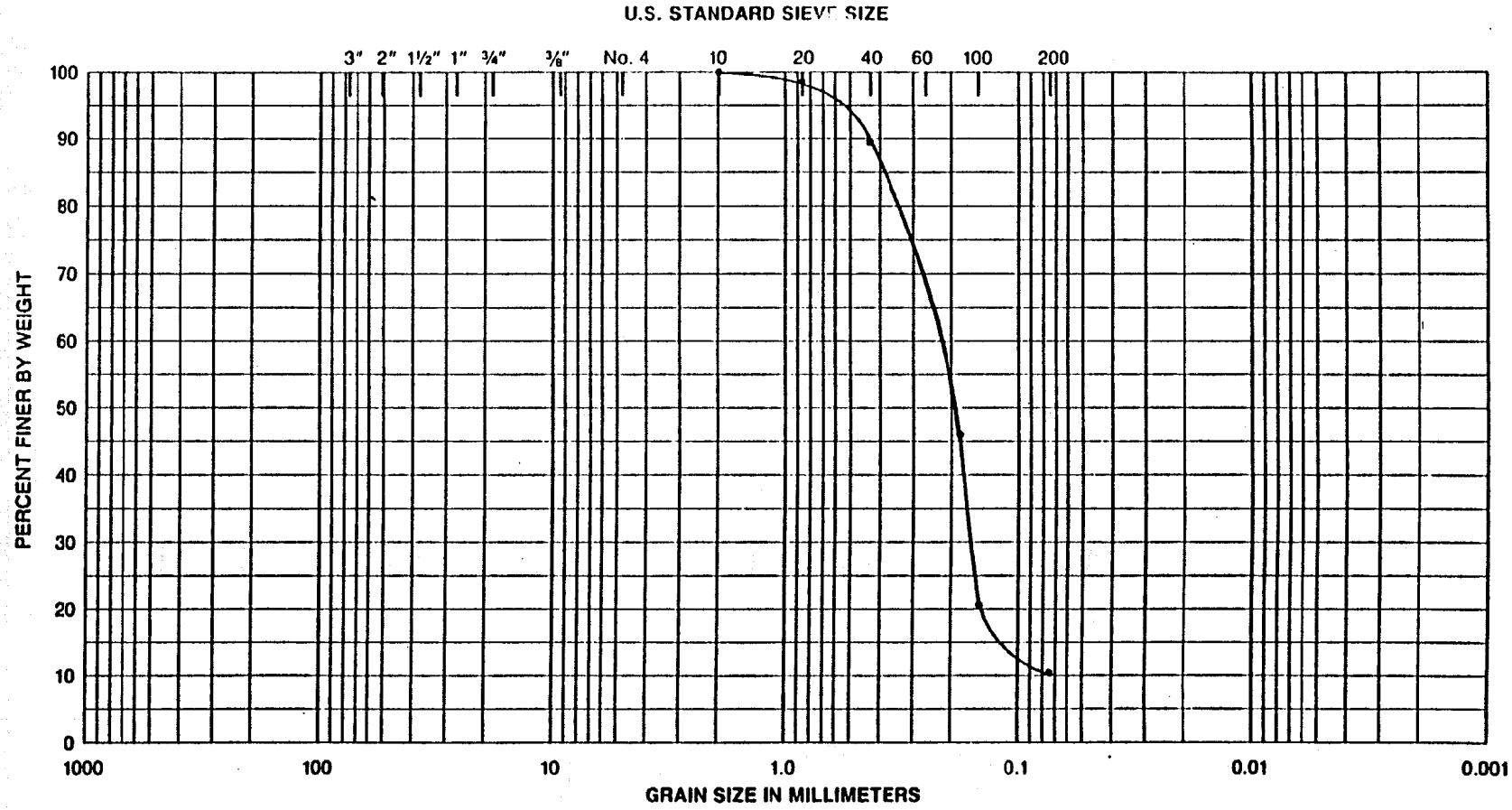
TEST BORING NO.	SAMPLE NO.	DEPTH FT.	LINE	GROUP SYM.	CLASSIFICATION	IN-SITU WC	LL	PL	PI	Gs	REMARKS	PLOTTED BY:
OLM-8	6	10'-12'	——	SP-SC	Slightly Clayey Fine SAND							JAE
			– –									
			–·–									
			–··–									

Pittsburgh Testing Laboratory

GRAIN SIZE DISTRIBUTION CURVE

ORDER NO. TAM-2536

CLIENT: Geraghty & Miller



TEST BORING NO.	SAMPLE NO.	DEPTH FT.	LINE	GROUP SYM.	CLASSIFICATION	IN-SITU WC	LL	PL	PI	Gs	REMARKS	PLOTTED BY:
OIM9	5	10'-12'	——	SP-SC	Very Slightly							JFE
			– –		Clayey Fine SAND							
			—•—									
			—••—									

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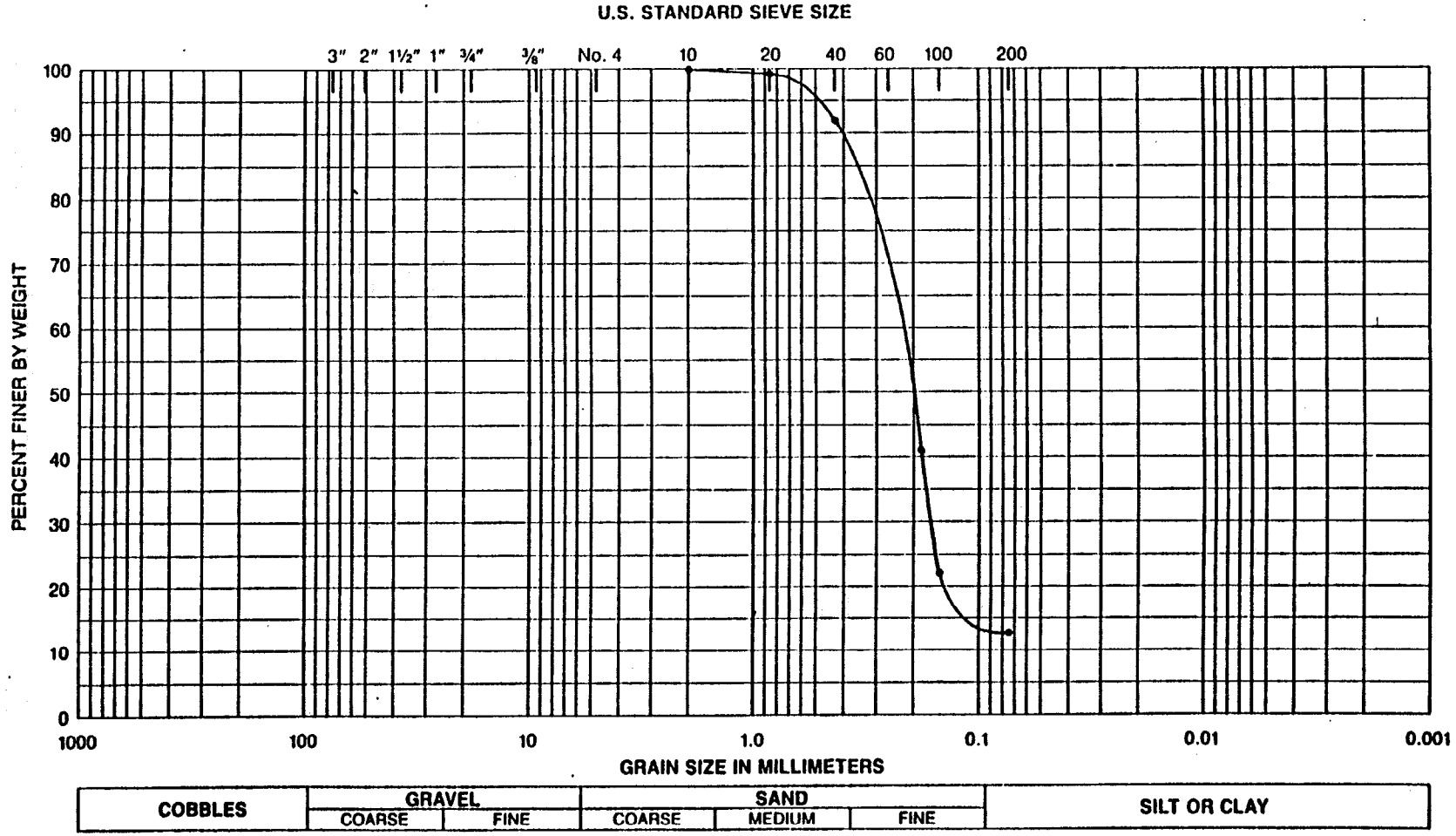
GRAIN SIZE DISTRIBUTION CURVE

ORDER NO. TAM-2536

CLIENT: Geraghty & Miller



TEST BORING NO.	SAMPLE NO.	DEPTH FT.	LINE	GROUP SYM.	CLASSIFICATION	IN-SITU WC	LL	PL	PI	Gs	REMARKS	PLOTTED BY:
OLM13	6	10'-12'	——	SC	Clayey Fine SAND							JFE
			– –									
			–·–									
			–··–									

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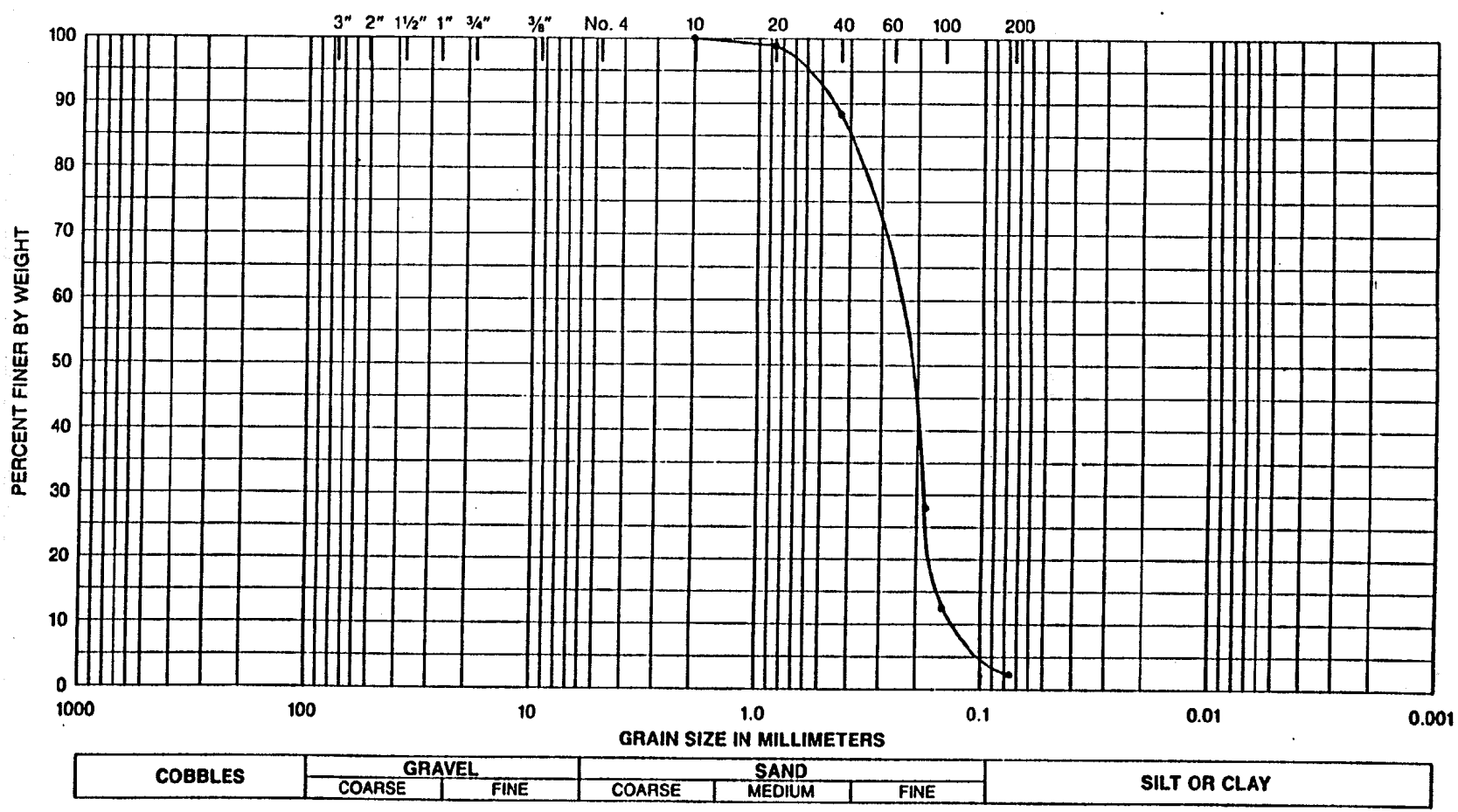
Pittsburgh Testing Laboratory

GRAIN SIZE DISTRIBUTION CURVE

ORDER NO. TAM-2536

CLIENT: Geraghty & Miller



TEST BORING NO.	SAMPLE NO.	DEPTH FT.	LINE	GROUP SYM.	CLASSIFICATION	IN-SITU WC	LL	PL	PI	Gs	REMARKS	PLOTTED BY:
OLM16		8'-10'	——	SP	Fine SAND							JFE
			– –									
			—·—									
			—··—									

100109

10-Nov-1994 04:58:22pm